

Amalgam restorations

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Restorative dental materials

- Temporary restorative materials
- Liners and bases
- Definitive restorative materials
 - Direct restorative dental materials (plastic)

Amalgams

Cement
Cermet Cement
Polymers
Composite

- Indirect restorative dental materials (solid)

Metal
Ceramic

- Glass-ceramic
- Direct Ceramic (Cerec)
- Gold-ceramic

Composite

Stages and steps in cavity preparation

- Initial cavity preparation stage

1. Outline form and initial depth

placing the cavity margin in the final preparation form

2. Primary resistance form

withstand of cavity walls and restorations occlusal forces without fracture

3. Primary retention form

the shape to resist displacement through tipping and lifting forces

4. Convenience form

Observation, accessibility, prep, restoration

- Final cavity preparation stage

5. Removal of carious dentin and
6. Pulp protection
7. Secondary resistance and retention forms
8. Finishing external walls
9. Cleaning

1. Slightly rounded configuration
2. Convergence occlusally of vestibular and oral walls
3. Gingival wall is min 1.2mm wide
4. Occlusal width and depth of the restoration 1.5-2 mm
5. Gingival extension
6. Margin of the cavity cca 90°
7. V-shaped side-fissure

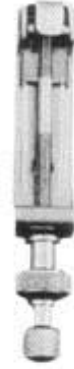
Restoration with Amalgam

- Preparation of the cavity
- Isolation
- Matrices and matrix retainer
- Wedge placement
- Trituration
- Insertion, condensation
- Carving, burnishing
- Finishing, polishing

1053-5mm
1054-6mm
1055-7mm
Ivory8



1056
Ivory 8 N



1057
Ivory 8



1058
Siqveland-
narrow

1058 Siqveland-wide



1060
Toffermire-
Universal



1061
Toffermire-
Senior



1062
Toffermire-
Junior



1063
Didher



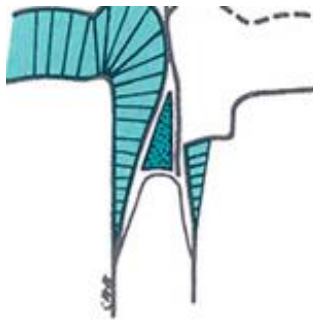
1064
Ivory



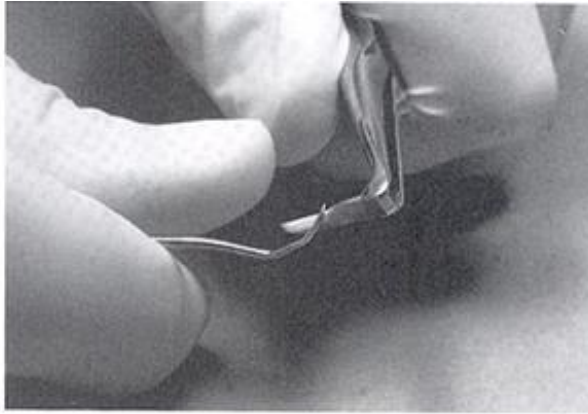
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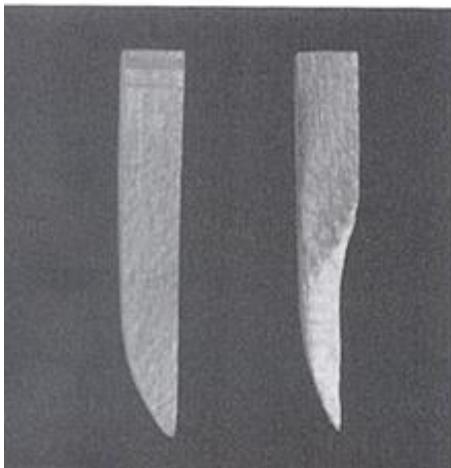
1066
Ivory separator



Tall triangular wedge incorrect for minimally extended gingival margin



B



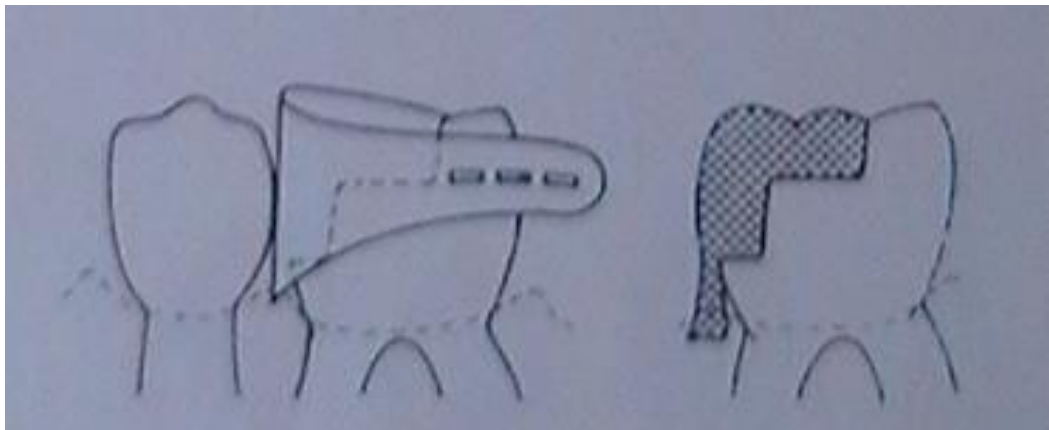
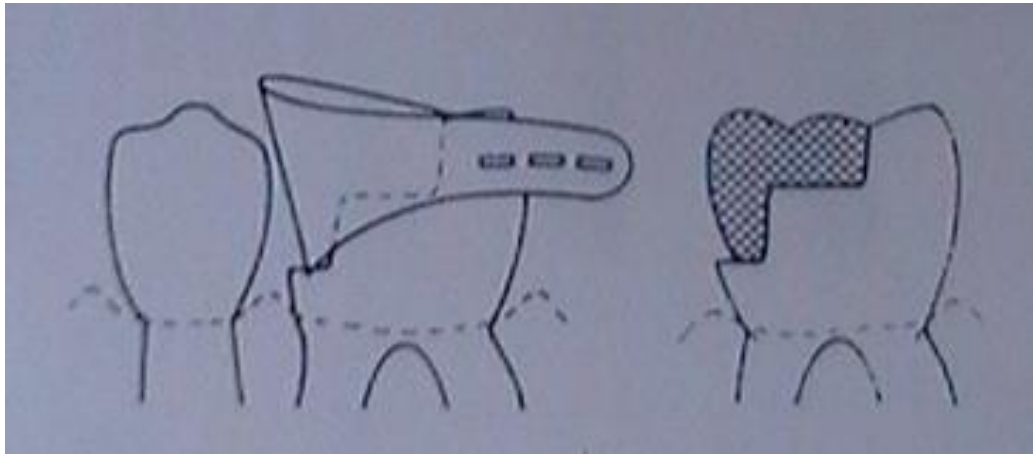
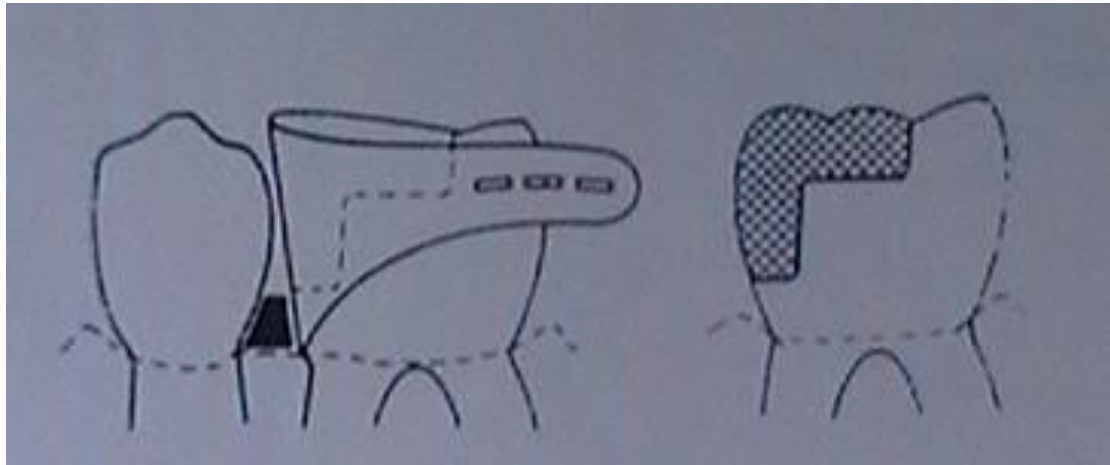
Wedges

- keep band tight at gingival margin and
- compensate for thickness of band material

Lateral and occlusogingival force is necessary to properly condense alloy

- into proximal locks and
- into angles at junction of

matrix band with margins of preparation



Define marginal ridge and

occlusal embrasure with explorer

Remove gingival excesses with amalgam knives

Carving

Burnishing

bring the teeth lightly together

cotton pelett – alcohol

articulating paper

(premature contact)

Check the occlusion in different sitting positions

Advices

- restrict chewing on the restoration for two hours.

- local anesthesia: to be careful not to bite their lips or cheek

- some sensitivity to cold and heat for few days can be .This should disappear gradually in few days or a week.

After 24 hours....finishing, polishing