

GOOD MORNING



ARRANGEMENT OF TEETH

Completed
Teeth arrangement



INTRODUCTION: Every system in this universe follows a set of rules. **A complete denture** is not an exception.

PATTERNS OF ARRANGEMENT: Teeth can be arranged in a complete denture either in

**BALANCED OCCLUSION
MONOPLANE OCCLUSION
LINGUALIZED OCCLUSION**

Each type ,even though has its own advantages and disadvantages, the most commonly employed occlusion is balanced type.

PRINCIPLES OF TEETH ARRANGEMENT:

Each tooth is placed into the wax by **softening** the wax in that portion.

Teeth should be arranged according to **certain** principles so that denture works efficiently when under function.

INDIVIDUAL
TOOTH
INDIVIDUAL
TOOTH
ARRANGEMENT

ORDER OF ARRANGEMENT OF TEETH

MAXILLARY

CENTRAL INCISSOR

LATERAL INCISSOR

CANINE

1ST PREMOLAR

2ND PREMOLAR

1ST MOLAR

2ND MOLAR

MANDIBULAR

CENTRAL INCISSOR

LATERAL INCISSOR

CANINE

1ST MOLAR

2ND MOLAR

2ND PREMOLAR

1ST PREMOLAR

MAXILLARY

CENTRAL INCISSOR

LATERAL INCISSOR

CANINE

1ST PREMOLAR

2ND PREMOLAR

1ST MOLAR

2ND MOLAR

MANDIBULAR

1ST MOLAR

2ND MOLAR

2ND PREMOLAR

CENTRAL INCISSOR

LATERAL INCISSOR

CANINE

1ST PREMOLAR

MAXILLARY CENTRAL INCISOR:

1. The long axis of the tooth is **parallel to vertical axis** when viewed from the front.
2. the long axis of the tooth is sloping labially when viewed from mesial or distal sides.
3. The incisal edge of the tooth **evenly contacts** the occlusal plane.

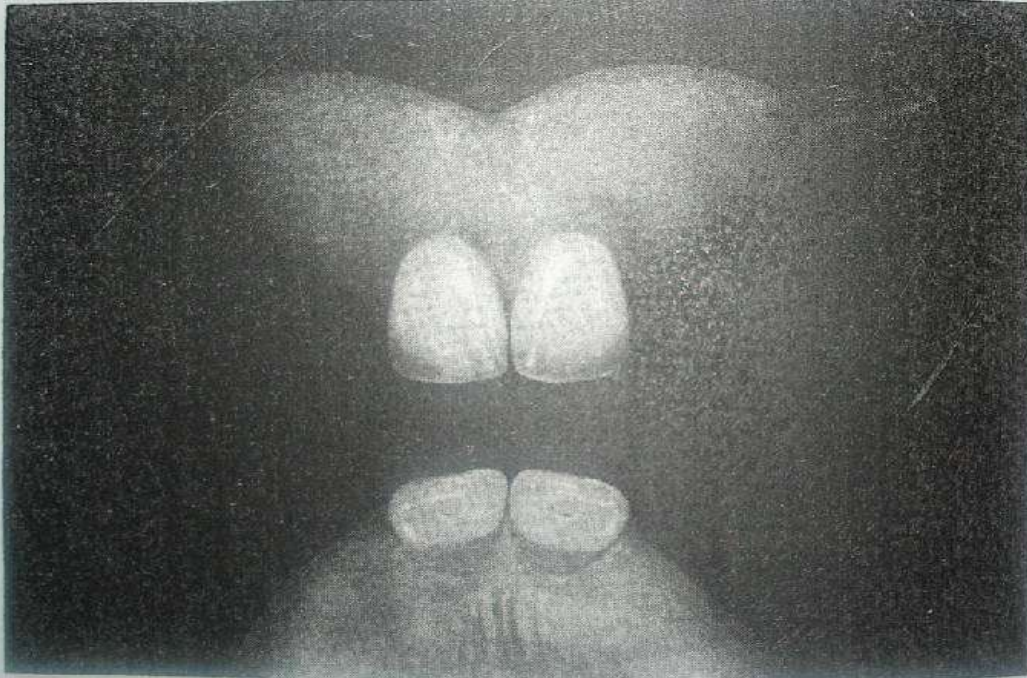


Fig. 8-22. Typical positioning for maxillary central incisors.

MAXILLARY LATERAL INCISOR:

1. The long axis of the tooth is **tilted mesially** when viewed from the front.
2. The long axis of the tooth is sloping labially when viewed from the side. The inclination of the slope is **greater than that of central incisor**.
3. The incisal edge is **2mm above** the level of occlusal plane. The mesio-incisal edge is tilted towards the midline.

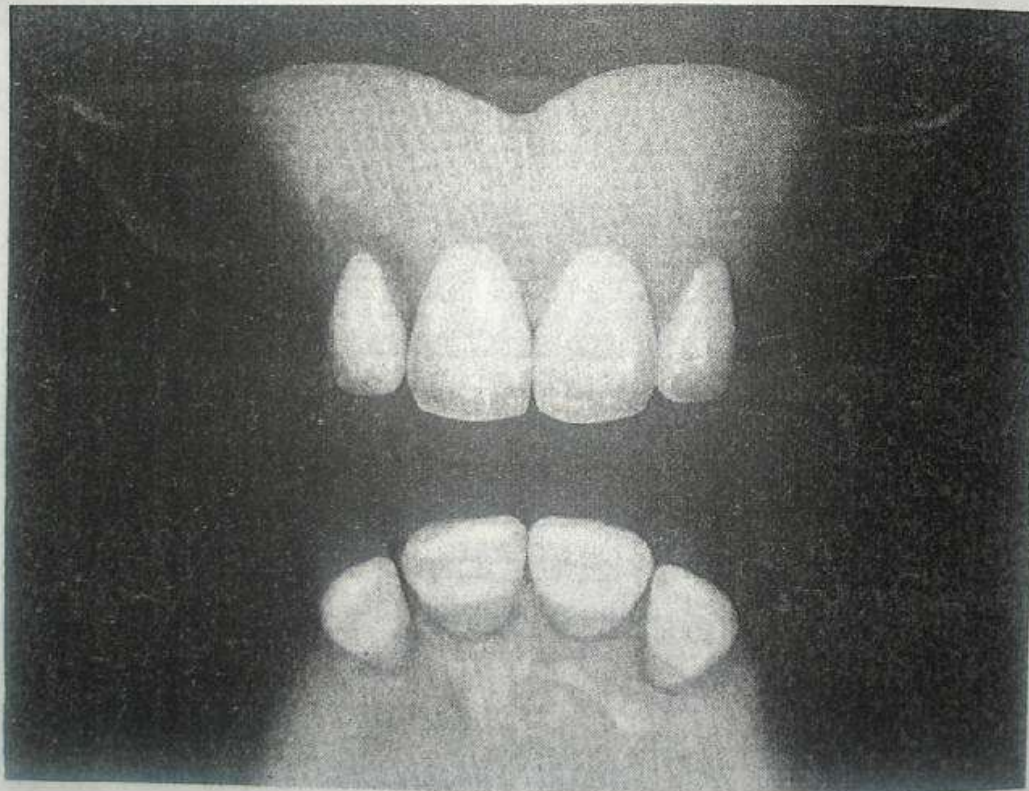


Fig. 8-23. Lateral incisors are positioned slightly shorter than centrals.



MAXILLARY CANINE:

1. The long axis of the tooth is **parallel** to the vertical axis when viewed from the front. **Slight mesial tilt** can be given to improve esthetics.
2. Long axis of the tooth is **parallel to vertical axis when viewed from the side.**
3. Cuspal tip of canine **touches** the plane of occlusion.
4. The cervical third of canine should be more prominent than cuspal third.



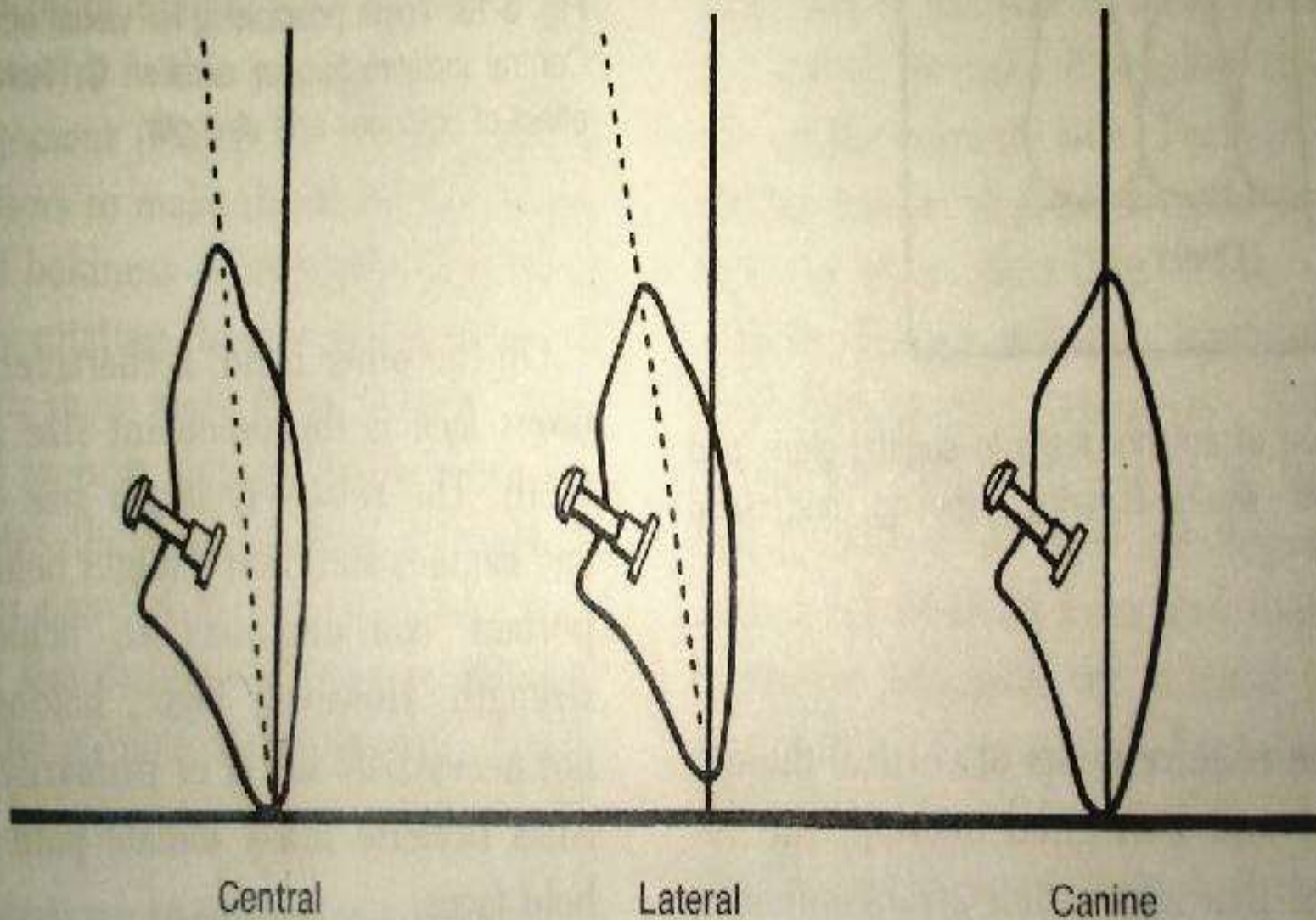
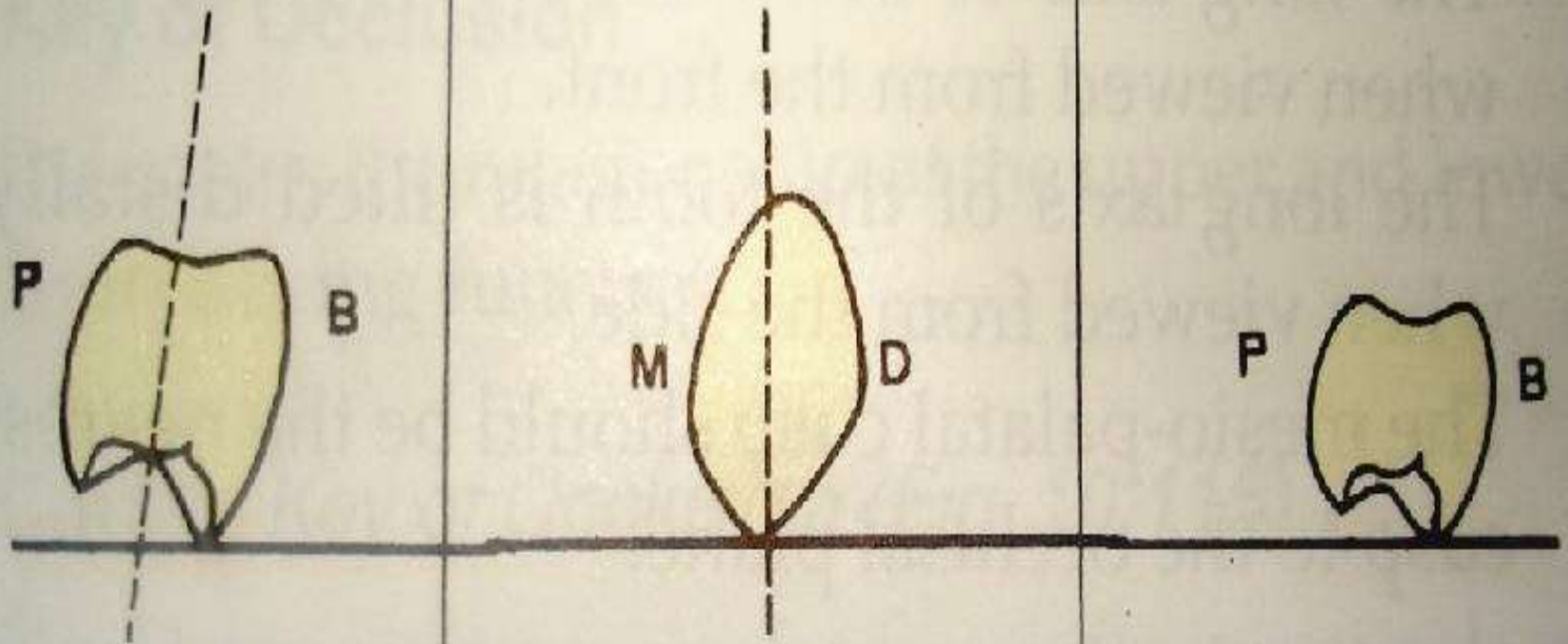


Fig. 8-11. Inclination of central, lateral, and canine teeth and their average relation to occlusal plane

MAXILLARY FIRST PREMOLAR:

1. The long axis of tooth is **parallel** to vertical axis when viewed from front.
2. Long axis is **parallel** to vertical axis when viewed from side.
3. The **buccal cusp touches the occlusal plane** and the **palatal cusp** is positioned about **0.5mm** above occlusal plane.



Figs 10.104a to c: P—Palatal, B—Buccal,
M—Mesial, D—Distal

MAXIILARY SECOND PREMOLAR:

1. Long axis of tooth is **parallel** to the vertical axis when viewed from front.
2. Long axis of tooth is **parallel** to vertical axis when viewed from side.
3. Both **buccal** and **palatal cusps** touch the occlusal plane.

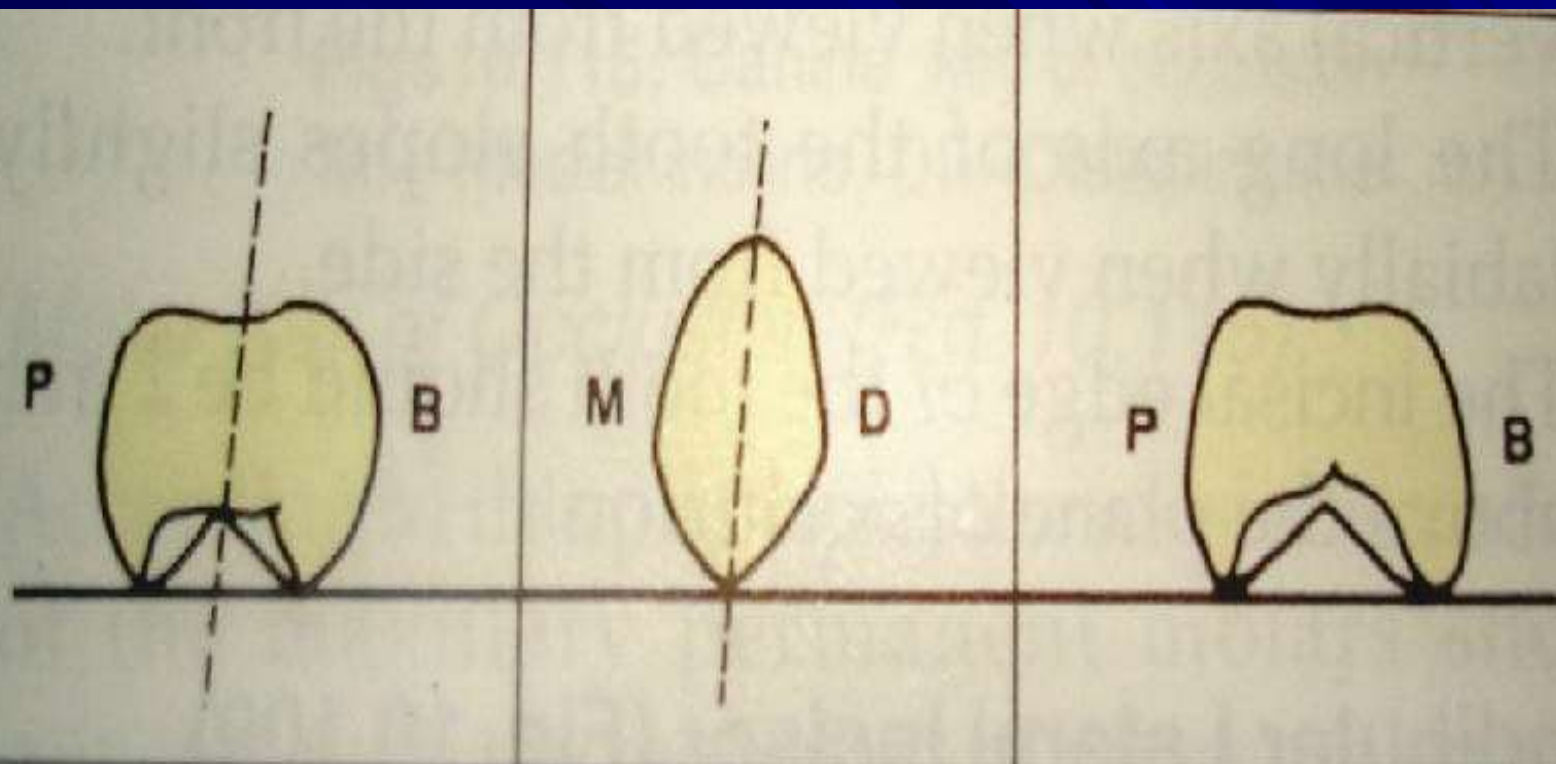
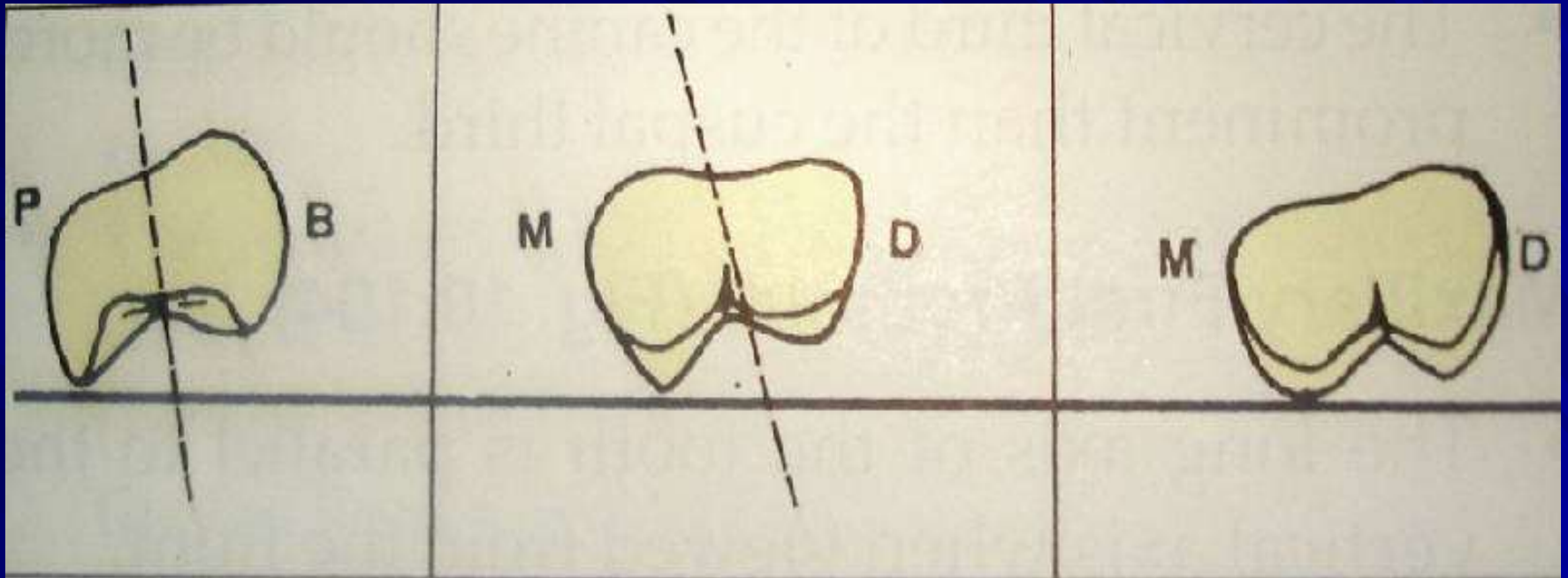


Fig.10.105a to c: P—Palatal, B—Buccal,
M—Mesial, D—Distal

MAXILLARY FIRST MOLAR:

1. Long axis of tooth is tilted **buccally** when viewed from the front.
2. The long axis of tooth is **tilted distally** when viewed from side.
3. Only the **mesio-palatal cusp** should touch the occlusal plane. This arrangement gives rise to antero-posterior and lateral curves.



Figs 10.106a to c: P—Palatal, B—Buccal,
M—Mesial, D—Distal

MAXILLARY SECOND MOLAR:

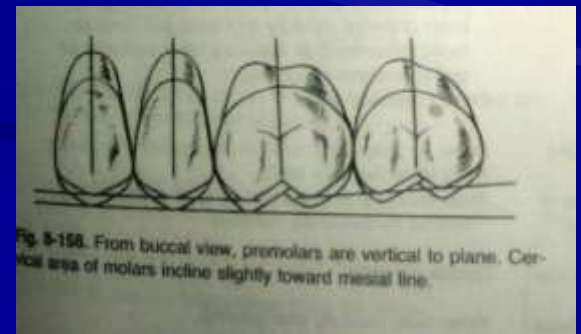
1. Long axis of tooth is tilted **buccally** when viewed from front.
2. Long axis of tooth is tilted **distally** when viewed from side.
3. **Mesio-palatal cusp** should be the nearest cusp to occlusal plane.

MANDIBULAR FIRST MOLAR:

1. Long axis of the tooth slopes slightly **lingually** when viewed from the front.
2. Long axis of tooth is tilted **mesially** when viewed from side.
3. **All the cusps are above** the level of occlusal plane with the mesial and lingual cusps being lower than distal and buccal cusps.

MANDIBULAR SECOND MOLAR:

1. Long axis of tooth slopes slightly **lingually** when viewed from front.
2. Long axis is tilted **mesially** when viewed from side.
3. All cusps are above the **level of first molar** with mesial and lingual cusps being lower than distal and buccal cusps.



MANDIBULAR SECOND PREMOLAR:

1. The long axis of the tooth slopes slightly **lingually** when viewed from front.
2. Long axis of tooth is **parallel** to the vertical axis when viewed from side.
3. Both the cusps are **2mm above** the level of occlusal plane.



MANDIBULAR CENTRAL INCISOR:

1. Long axis tooth is **parallel** to the vertical axis when viewed from front.
2. Long axis of tooth slopes slightly **labially** when viewed from side.
3. The incisal edge of tooth should be **2mm above** the level of occlusal plane.

MANDIBULAR LATERAL INCISOR:

1. The long axis of tooth is **parallel** to vertical axis when viewed from front.
2. The long axis of tooth slopes slightly **labially** when viewed from side.
3. The incisal edge of tooth should be **2mm** above the plane of occlusion.

MANDIBULAR CANINE:

1. Long axis of tooth is slightly tilted **lingually** when viewed from front.
2. The long axis of tooth slopes slightly **mesially** when viewed from side.
3. The canine tip is **little more than 2mm** above the occlusal plane.



Central incisors

Lateral incisors

Canines

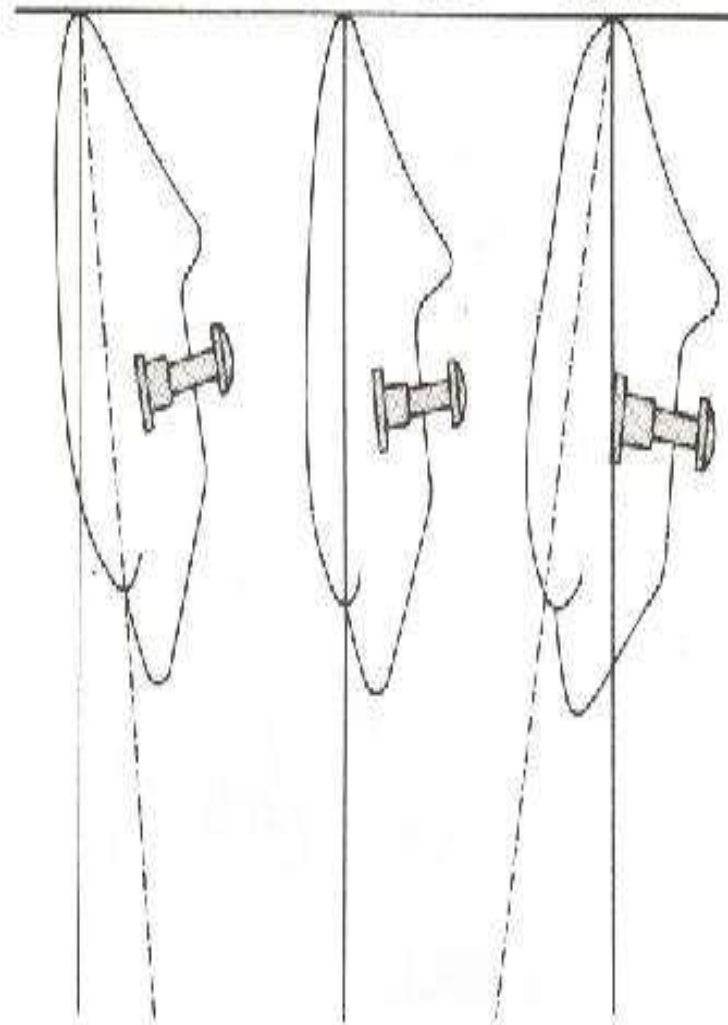


Fig. 5-60 Labiolingual inclinations of the lower anterior teeth.

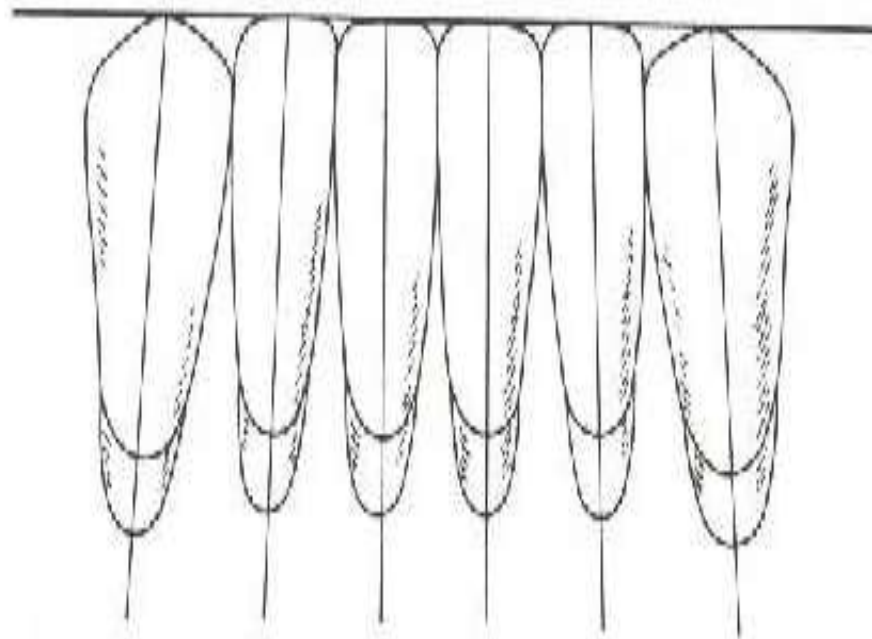


Fig. 5-61 Mesiodistal inclinations of the lower anterior teeth.

MANDIBULAR FIRST PREMOLAR:

1. Long axis of tooth slopes slightly **lingually when viewed from front.**
2. Long axis of tooth is **parallel** to vertical axis when viewed from side.
3. The lingual cusp is below the occlusal plane and the buccal cusp should be **2mm above** the occlusal plane.



KEY OF OCCLUSION:

1. Canine key of occlusion

2. Molar key of occlusion



ARCH FORM: usually the maxillary arch is U shaped and mandibular arch is V shaped.

But since arch form varies with patient, operator should change the arrangement according to existing arch form and should never lose symmetry.

1. Maxillary arch should have a smooth curve formed by incisal edges of anteriors.
2. Canine marks the turn of the arch and is the most prominent tooth among anteriors.
3. Posteriors can be arranged according to two concepts:
 - Aligned occlusal groove concept
 - Aligned buccal ridge concept

Aligned occlusal groove concept:

The central grooves of all the maxillary posteriors should lie on the straight line joining the tip or distal slope of the canine anteriorly and the mid point of the occlusal rim posteriorly.

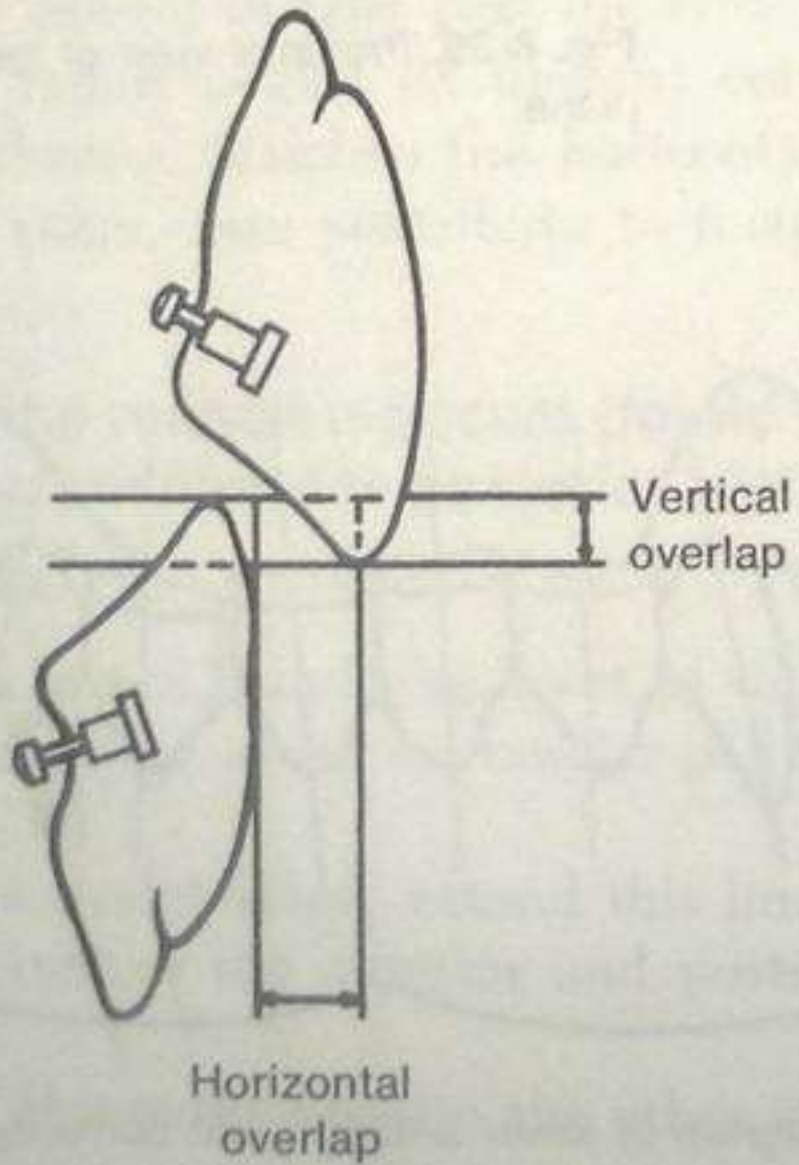


Aligned buccal ridge concept:

The line formed by the central grooves should pass lingual to the canine and buccal ridges of the maxillary canine, maxillary first premolar, second premolar and mesio-buccal line angle of the maxillary first molar should be in a straight line.

OVERJET AND OVERBITE:

1. The horizontal over lap of maxillary incisors over the mandibular incisors - OVERJET- should be ideally 2mm.
2. The vertical overlap of maxillary incisors over the mandibular incisors –OVERBITE- ranges from 0.5 – 1 mm.



COMPENSATING CURVES:

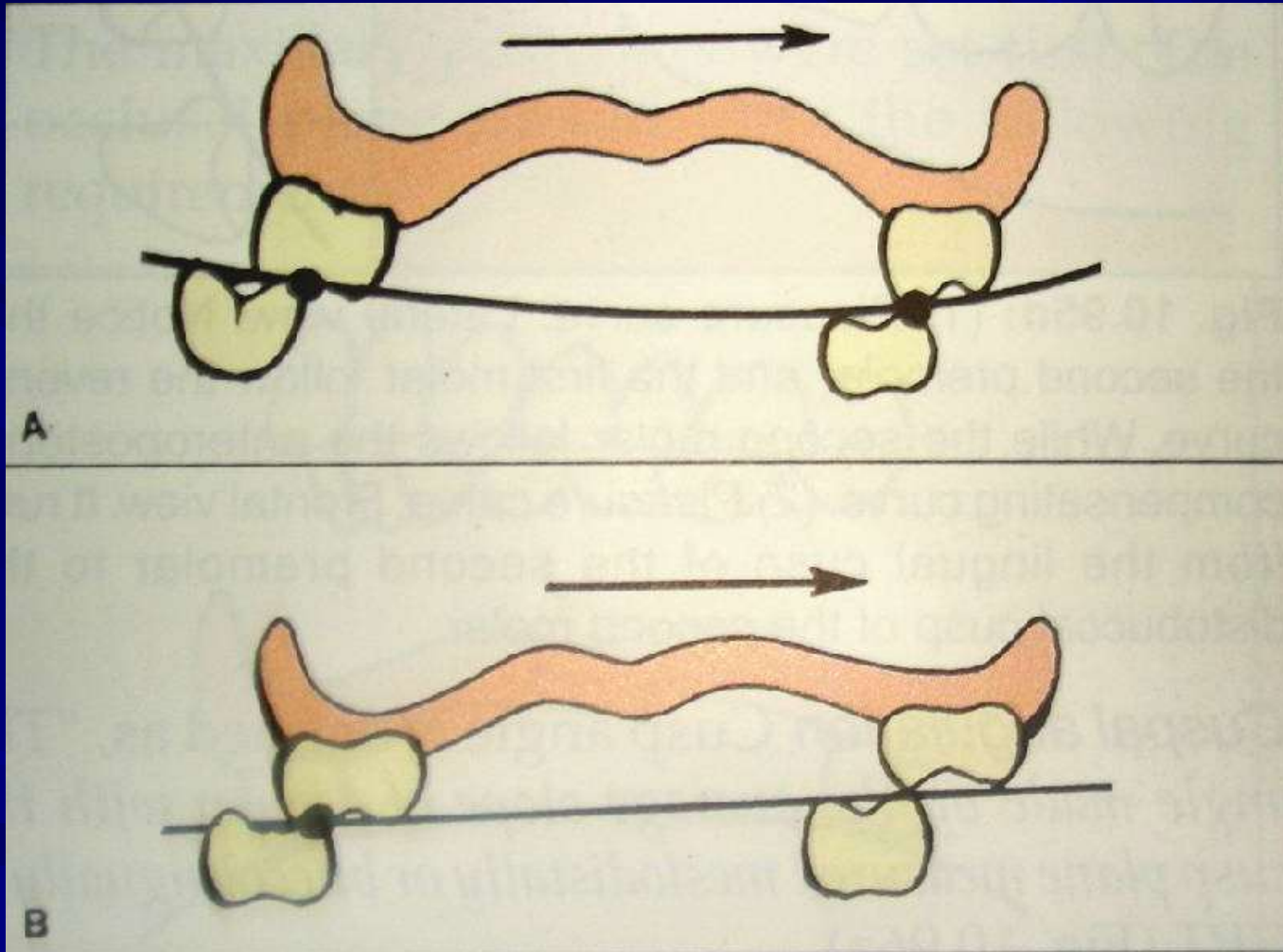
Arrangement of teeth according to previous principles will automatically incorporate the compensating curves –

Curve of spee,

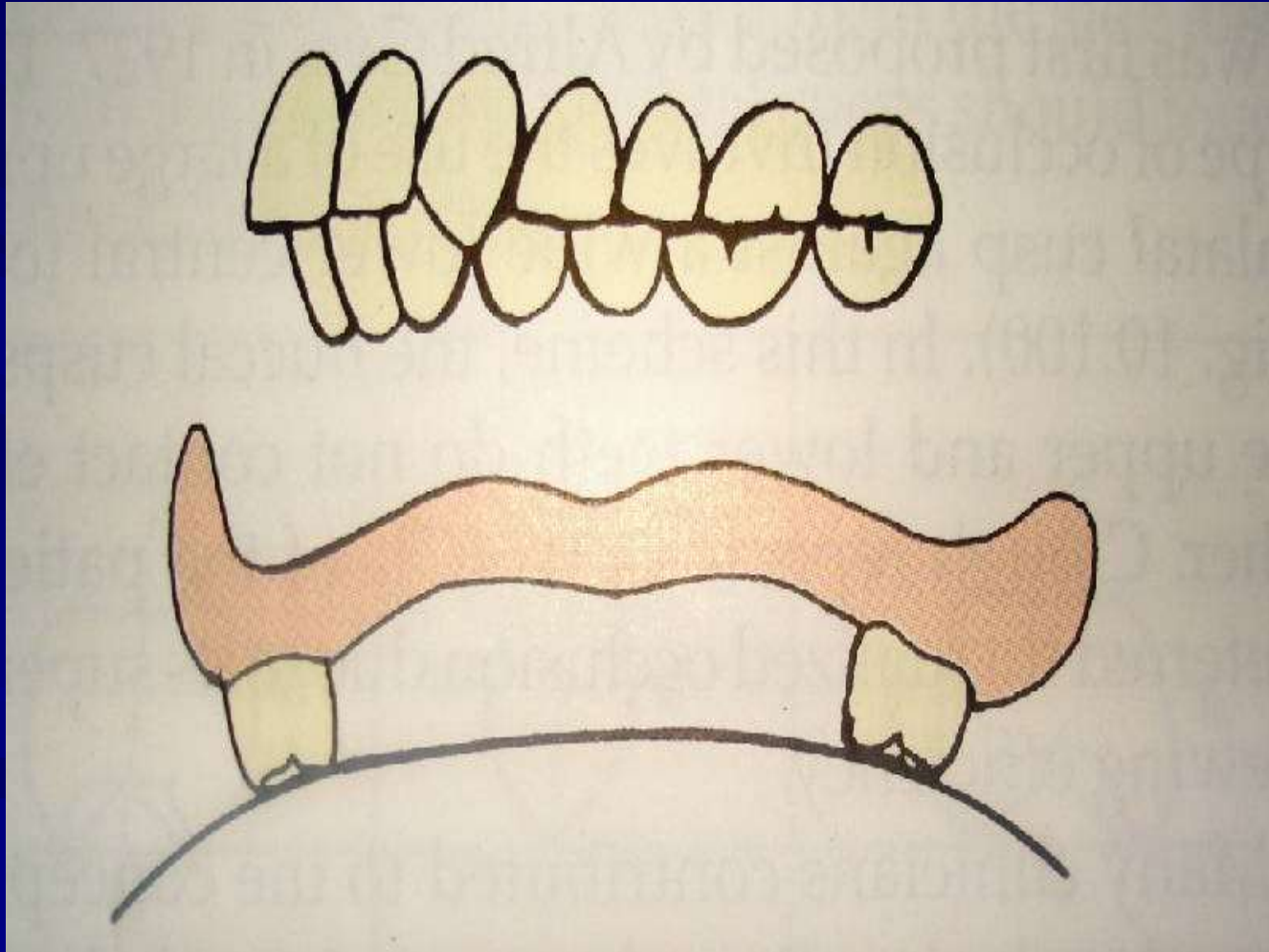
Curve of wilson ,

Monson's curve- which are essential for balanced occlusion.

Monson's curve



Curve of wilson



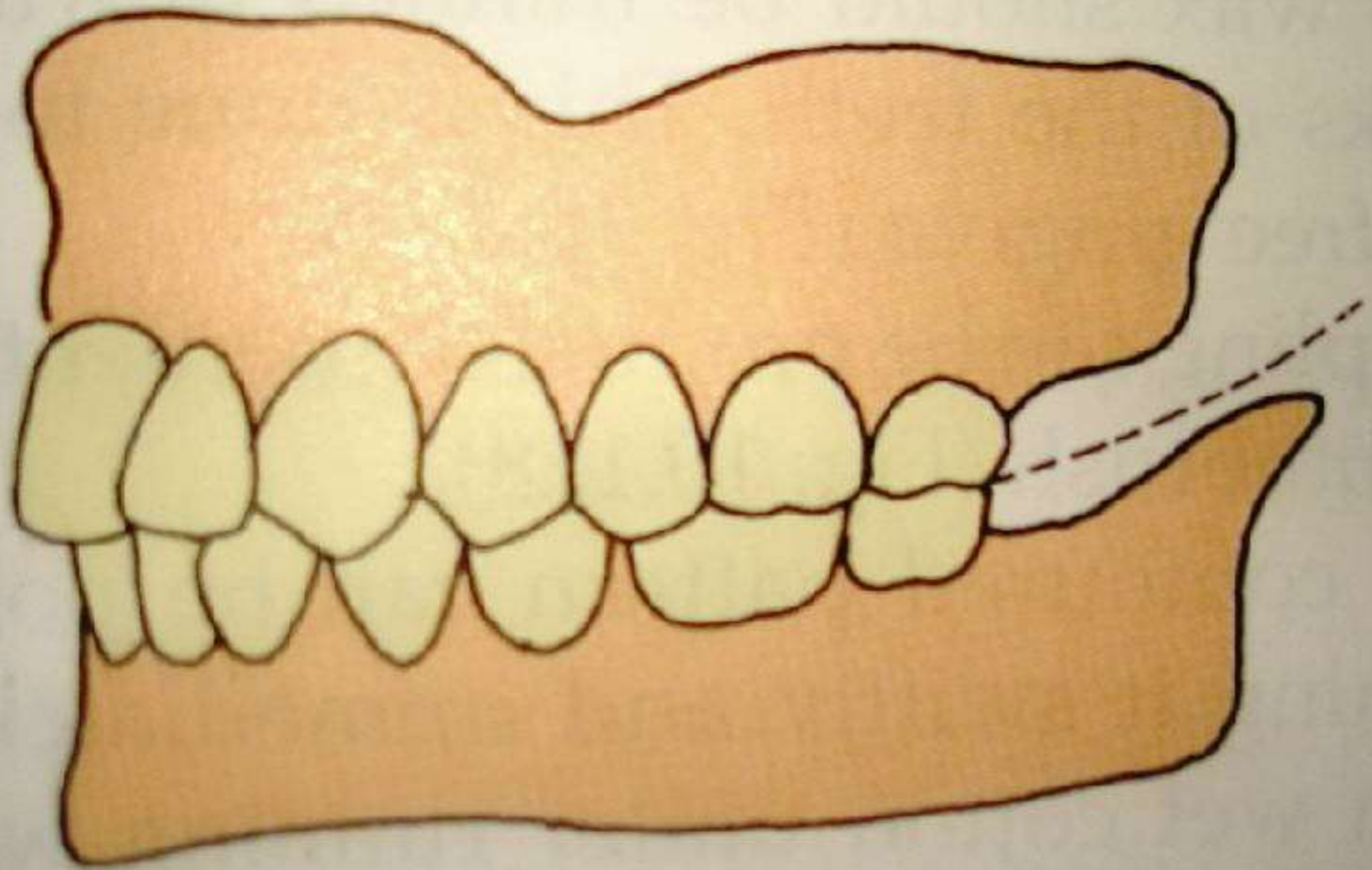


Fig.10.121: Compensated curve of Spee

33-DEGREE ANATOMIC TEETH

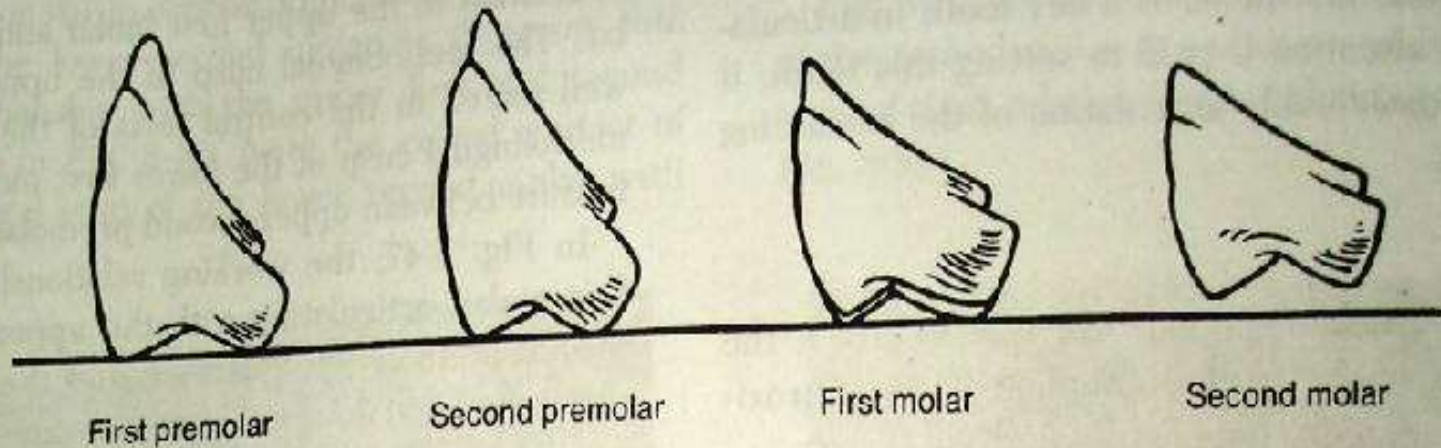


Fig. 8-42. Typical cusp relationships of 33-degree anatomic teeth to flat occlusal plane.

20-DEGREE ANATOMIC TEETH

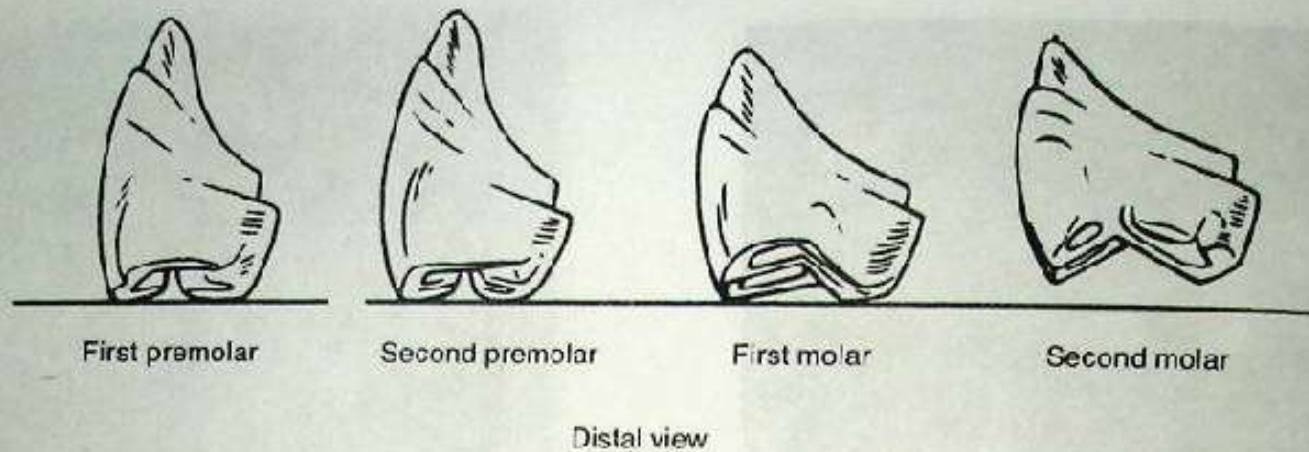
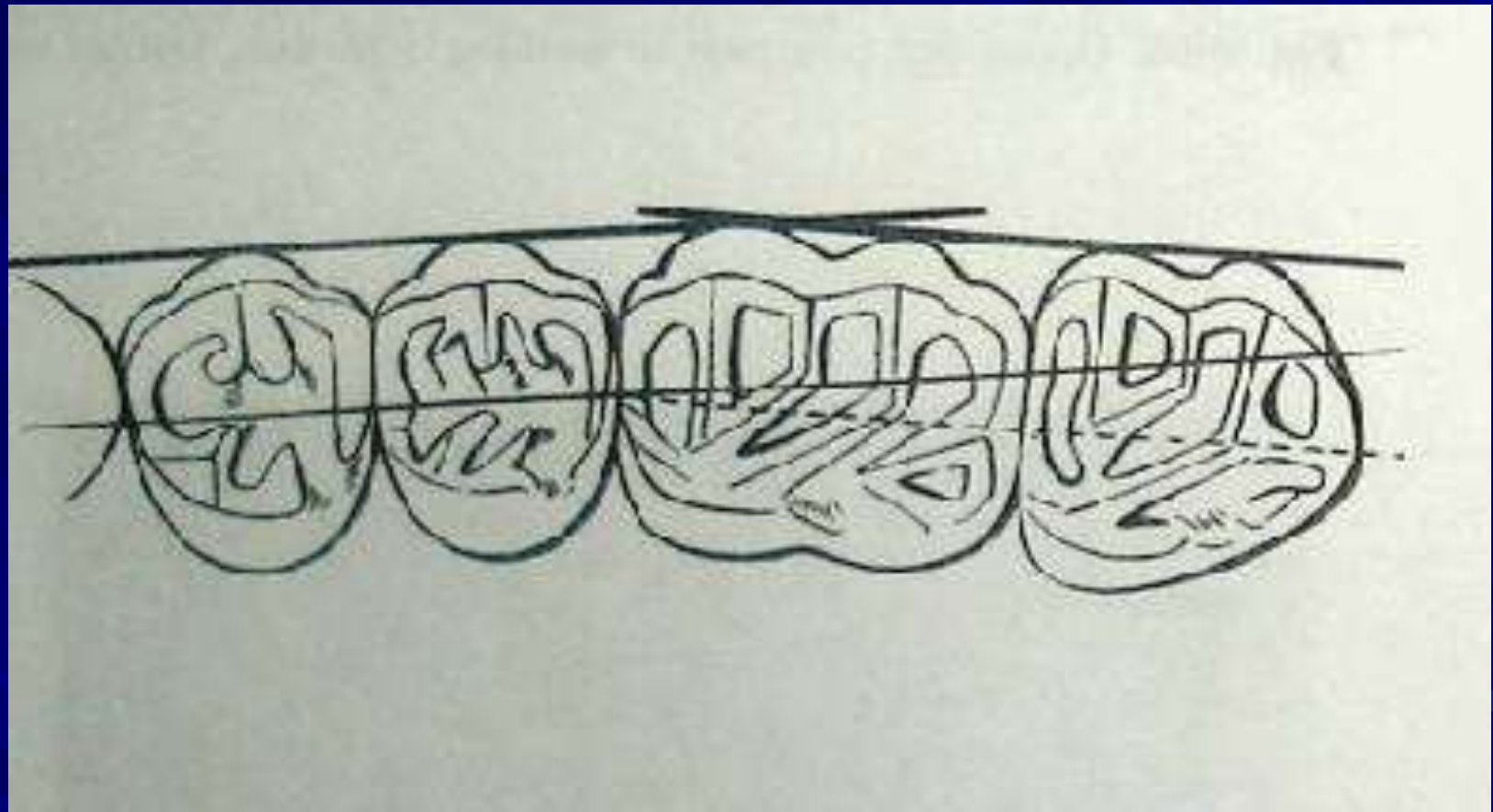


Fig. 8-97. Typical cusp relationships of 20-degree posterior teeth to flat occlusal plane.



A vast field of red tulips stretches across the entire frame, creating a dense, vibrant background. The flowers are in various stages of bloom, with some fully open and others as buds. The green stems and leaves are visible between the red petals. Overlaid in the center of the image is the word "THANKU" in a large, bold, blue font with a dark blue outline. The letters are stylized with a slight curve and a drop shadow effect, making them stand out against the floral background.

THANKU