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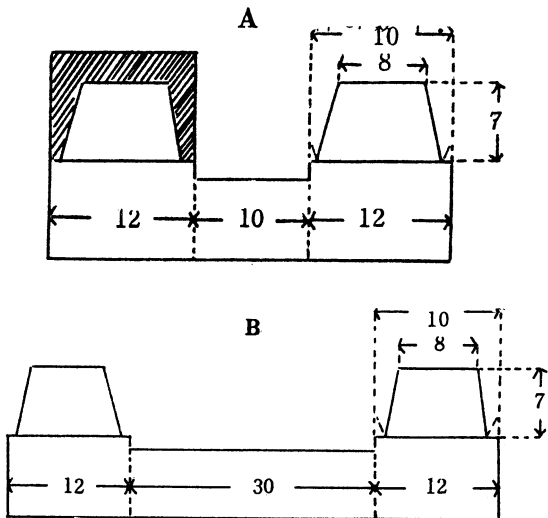
## II. 실험재료와 실험방법

### 1. 실험재료

- (1) Random & Randolph soldering investment
- (2) G-C S Quartz investment
- (3) A Type gold alloy
- (4) G-C S blue inlay wax
- (5) Jelenko wetting agent
- (6) Whip-mix Vacuum investing machine
- (7) 10×顯微鏡 Nikon 1/100mm micrometer
- (8) acetylene gas soldering blow pipe
- (9) 18 karat soldering metal (W.E. Mowery co. 650 fine)
- (10) Casing ring (12) 個
  - 30mm, 50mm ring 6個
  - 50mm, 50mm ring 6個
- (11) Crown & bridge 原型

### 2. 실험방법

- (1) 3本 bridge 5本 bridge stainless steel
  - 3本 bridge 10.0mm ( 1 A), 5本 bridge 30mm ( 1 B)



1.

### (2) Wax pattern

Wax waxing up  
 dipping method wax build up  
 가 1-A  
 wax pattern  
 Pontic 3本 bridge 6個, 5本 bridge 6個 12個  
 (3) spruing, 最大 厚經部 10 gauge wax sprue  
 sprue former wax pattern 洗滌, Jelenko wetting agent  
 Quartz investment (G-C 'S ) W/P ratio = 0.35 whip-mix vacuum investing (60rpm) mixing  
 1 furnace sprue hole  
 가 ring dml 60 1300 30  
 Kerr centrifugal casting machine  
 A tapy malting

### (4) soldering assembly

casting body가 除去  
 sprue 切斷 retainer  
 pontic 適合  
 sticky wax 連結部位  
 dental plaster mix soldering matrix uillity wax  
 soldering assembly가 15mm, 20mm, did block 5mm 가  
 plaster matrix trimming boxing  
 plaster matrix 分離材  
 Random & randolph investment 指示  
 investing

### (5)

furnace soldering  
 soldering 18K soldering metal  
 0.1g 650 가  
 furnace 가  
 ( flux ) 10  
 cooling Quenching soldering assembly casting body  
 Open-flame soldering

furnace 50 furnace  
 bunsen burner stand 3 preheating 가 良  
 bridge 3, 5 bridge 5 가 Open-flame preheating  
 flame solder metal melting  
 (fulx )  
 (6) Stackhouse가 plaster index  
 bridge stainless steel 誤差  
 finger pressure(指壓) Fusayama  
 10x Nikon meyer, Stackhouse, Tylman  
 micrometer 裝置 buccal, lingual, mesial, 模型 金融  
 distal margin 4 間 最終

### III. 실험성적 및 고찰

furnace Open-flame 가 furnace  
 3 preheating open flame  
 preheating bridge span  
 metal flame 가  
 preheating 가 furnace  
 bridge  
 Table.

furnace soldering : mm

	buccal margin	lingual margin	mesial margin	distal margin
①	0.02	0.02	0.04	0.03
3 本 ②	0.03	0.02	0.03	0.04
bridge ③	0.03	0.03	0.03	0.04
平均	0.03	0.02	0.03	0.04
①	0.03	0.03	0.06	0.05
5 本 ②	0.04	0.03	0.05	0.07
bridge ③	0.04	0.05	0.06	0.08
平均	0.04	0.04	0.06	0.07

#### 2. Open-flame soldering

	buccal margin	lingual margin	mesial margin	distal margin
①	0.04	0.03	0.06	0.07
3 本 ②	0.03	0.03	0.07	0.07
bridge ③	0.04	0.04	0.05	0.06
平均	0.04	0.03	0.06	0.07
①	0.10	0.09	0.15	0.13
5 本 ②	0.12	0.08	0.16	0.12
bridge ③	0.08	0.13	0.20	0.12
平均	0.10	0.10	0.17	0.12

(本 實驗의 測定은 4 名의 檢査者가 각기 單獨的으로 2 番씩 個個 平均値를 算出한 것임)

## V. 결 론

Soldering Preheating

1) furnace open-flame  
가

bridge span 가

2) 3本 bridge가 5  
本 bridge buccal margin 0.01mm,  
lingual margin 0.02mm, mesial margin  
0.03mm, distal margin 0.03mm

3) 3本 bridge가 5  
本 bridge buccal margin 0.06mm,  
lingual margin 0.07mm, mesial margin  
0.01mm, distal margin 0.06mm

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