The ROYAL CANADIAN DENTAL CORPS Quarterly

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THE RCDC QUARTERLY

Published by authority of Brigadier KM Baird, Director General of Dental Services for the Canadian Forces

Editorial Board: Col GB Shillington
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SUBSCRIPTION RATES

The RCDC Quarterly may be subscribed for at $4.00 per year by writing to:

Director General of Dental Services
for the Canadian Forces,
Army Headquarters,
Ottawa, Ontario.

Cover Photo - Aerial View of Fort Churchill

E D I T O R I A L

Clinic Returns

The compilation of dental treatment and laboratory returns is a responsibility which must be accepted by all dental clinic personnel, although, from time to time doubts are expressed regarding the need for and desirability of these records. In view of this, it is perhaps appropriate to review the need for clinic returns.

First of all, it cannot be denied that the primary role of the RCDC is to provide dental treatment and consequently, the amount and type of dentistry performed is probably the most important measure of the Corps' progress. In this regard, the records show that over the past ten years there has been a 20.5% increase in the amount of dental treatment provided per duty day. All personnel should take pride in this accomplishment.

Secondly, and equally important, the data compiled from clinic returns are fundamental to planning and to the direction of the Corps. They have formed the basis for submissions which have obtained, and continue to obtain, such improvements for the Corps as laboratory officers, the new subsidization plan, research activities and Dental Officer Allowance; they are used to estimate financial requirements and stores purchases; they can also influence training policy and the employment of auxiliary personnel, in addition to being the source which permits accurate replies to enquiries from higher authority.

It is readily apparent, then, that the information obtained from clinic returns is essential for effective administration of the Corps. However, the accuracy of this information is dependent upon the integrity of clinic personnel and their ability to complete returns in accordance with the Manual of Dental Services.

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1960/61 Statistics

During the 1960/61 fiscal year 528,676 dental operations, worth $2,606,301, were performed by Corps personnel in 35,115 working days on 354,522 patients. Included in these operations were 139,976 amalgams, 35,029 silicates, 1000 bridges, 4,022 complete dentures, 4,559 partial dentures, 15,619 periodontal treatments and 872 root canals.

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NO 14 DENTAL COMPANY

Col CE Purdy, CD, DDS

No 14 Dental Coy came into being on the 28th of June 1950. Prior to this date, the vast areas of Western Canada from the Ontario border to the Pacific Ocean were served by 11 Dental Coy with Headquarters in Alberta. Lt Col JA MacGowan was appointed to command 14 Coy and arrived at Fort Osborne Barracks, Winnipeg, to assume his duties on 5 Jul 50. The initial strength of this unit comprised 5 dental officers and 12 other ranks. The establishment of a Headquarters, Stores element and additional clinics soon swelled the unit's strength and in Nov 50, the unit paraded for inspection by the General Officer Commanding, Prairie Command.

The Area of responsibility of 14 Dental Coy includes the provinces of Manitoba and Saskatchewan which comprise half a million square miles of variable terrain. Although many Canadians picture the area as a vast treeless plain, a closer inspection reveals that the provinces are two-thirds wooded and covered with numerous lakes and streams. The southern half of the provinces as seen by the trans-continental traveller are moisture deficient areas which inhibit forest growth. The residue moisture from snow and infrequent rains usually provide a suitable environment for agriculture which gives Canada a prominent place as one of the world's great grain producers. Extremes of temperature are experienced in both provinces during the year. Many beautiful forest and lake areas have been set aside for the enjoyment of the sportsman and holidayer. Beautiful national and provincial parks capture the fancy of nature lovers and provide unlimited facilities for accommodation, camping and water sports of all kinds.

The Headquarters of 14 Dental Coy, located at Winnipeg, administers and supplies the requirements for ten separate clinics located at various service installations across the two provinces. The dental clinic at the far northern establishment of Fort Churchill is somewhat unique with its diversified clientele. At this remote outpost dental service is provided for Eskimoes, Indians, Mariners, civilians, government employees and dependents as well as servicemen of the Canadian and US Armed Forces. The nearest civilian dental facilities are located nearly 500 miles distant. Periodically a dental team from this outpost proceeds north to within a few hundred miles of the North Pole to provide dental services for Canadian Forces personnel at Alert. RCDC personnel on posting to Fort Churchill are eligible to undergo an Arctic Indoctrination Course which involves outdoor living and navigation across the tundra wastelands under severe weather conditions.

Although the treatment load is heavy at all locations, the service population in the Winnipeg area demands the largest clinical facilities. A clinic with 7 operating bays provides treatment services for personnel at Air Training Command Headquarters and RCAF Station Winnipeg. The clinic located at Fort Osborne Barracks is soon to be expanded to provide 5 operating bays. A multiple clinic is also provided at Camp Shilo as well as Fort Churchill. The service personnel at RCAF Stations Gimli, Portage la Prairie, Moose Jaw, Saskatoon and the Canadian Joint Air Training Centre at Rivers are served by full-time single detachment staffs. Clinical services for Headquarters Saskatchewan Area in Regina are provided on a part-time basis and supplemented by the services of the local civilian dental practitioners.

Over the years 14 Dental Coy has been proud of its steady progress and accomplishment in the provision of dental treatment services. Excellent relations with various service and professional groups have been maintained. The cooperation and loyalty of all members of the unit have contributed much for the betterment of all.

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THE MANIPULATION OF RUBBER BASE IMPRESSION MATERIAL

Major SW Muller, CD, DDS

Indirect techniques in Crown and Bridge work have undergone and continue to undergo improvement. To a large extent these changes are due to new impression materials and new methods of producing accurate models. Regardless of how complete the diagnosis or how exacting the preparations, unless this accuracy can be carried through to the working model the result will be something short of perfect.

A wide range of impression materials with variable physical properties are available to the dentist. Plaster, wax and compounds have obvious disadvantages which preclude their use in the intricate, indirect techniques. The irreversible hydrocolloids (alginates) are used with varying degrees of success. Generally these lack the toughness required for an accurate reproduction of fine grooves and pin preparations. The reversible hydrocolloids have been used for many years and are still considered an acceptable material. Their chief disadvantage is the amount of time required for the preparation of equipment. Also, they cannot be electroplated with metal. The silicones have a very limited shelf-life and some difficulties are encountered in acquiring a routinely uniform mix with the use of such a concentrated catalyst. These sometimes produce faulty models with soft chalky surfaces.

The rubber base materials referred to as Thiokols, or more correctly the Mercaptans have gained favour as an impression material in restorative work. Since their introduction a few years ago, several modifications have greatly enhanced their acceptance by the profession. The Thiokols are accurate, elastic, and comparatively stable materials that give a good registration of surface detail. They may be poured in stone or electroformed with silver. In average cases where severe external undercuts are absent, two accurate stone dies can be poured from one impression. Schnell and Phillips (1) report that "successive dies may be poured in one impression with no greater distortion than storage of the unpoured impression for a comparable period".

The rubber base products are marketed in the form of a paste-like base material and a paste or fluid catalyst or activator. When the recommended proportions are mixed together an impression paste is obtained which polymerizes in a short time to a solid rubber. The introduction of light-bodied products has made the use of the syringe possible. The syringe provides an efficient means of quickly and accurately introducing the impression material into prepared cavities. It is particularly valuable in the elimination of voids in critical areas.

Packing

The use of gingival packing is recommended prior to impression taking. The string type, such as "Gingi-pak" is effective in a matter of minutes. A suitable length can be determined from the study model. A single strand is firmly placed deep in the gingival sulcus. This is followed by two more strands twisted together and placed on top of the first. These three strands now form a wedge-shaped mass that will, on removal, allow for the introduction of an adequate bulk of impression material to give a suitable registration of this area. This retraction material should remain in place from five to eight minutes prior to impression taking. When allowed to remain place for such a short period of time no damage to the tissue is apparent.

Drying

Mouth preparation for the introduction of rubber-base materials requires isolation of the area with cotton rolls, placing of a saliva ejector and careful

drying of the teeth and soft tissue with cotton. The teeth should not be air dried prior to taking rubber impressions. The slight moisture remaining after drying with cotton prevents the impression sticking to rough areas on the enamel surface.

Tray Selection

Unless the bridge to be constructed is very large, the small, one quadrant type tray is preferred. One fabricated from perforated metal with a suitable handle may be used in lieu of the stock metal tray. Where the edentulous area comprises two or more missing teeth, the use of a custom made acrylic tray is favoured. This may be readily constructed on the study model. All impression materials are subject to dimensional change after removal from the mouth. This change is more pronounced in areas of greater bulk. The importance of a uniform thickness of impression material is therefore obvious and requires a custom made tray to overcome the bulk of material in large edentulous areas.

The acrylic tray can be made quite easily by placing a thickness of base plate wax over the area to be covered by the tray. Stops are provided by cutting away a small portion of the wax from at least two places on the occlusal or incisal of teeth. The tray should extend at least one full tooth beyond the abutment teeth. With the wax in place on the model, quick curing acrylic is mixed, and when the doughy stage is reached it is pressed over the wax to cover the required area. A strong metal or acrylic handle is then applied to the tray. This should be so placed that it will permit a firm grasp when seated in the mouth. The tray should be removed from the model as the acrylic enters the exothermic stage referred to by Jelenko (2). The removal of the wax provides a uniform space for the impression material. The edges of the tray are trimmed and it is returned to the model for checking. It is advisable at this stage to mark with pencil on the labial of the tray the exact tooth that a particular part of the tray will engage. This greatly simplifies proper seating of the tray when loaded with the rubber material.

Most manufacturers supply an adhesive with their rubber base materials. This should be used on all non-perforated trays according to the manufacturer's directions. It is usually applied to the inside of the tray at least 10 minutes prior to filling. The use of certain adhesives on compound-lined trays is not recommended. Tests should be made beforehand since some act as solvents and result in a softening of the compound and no adhesion.

Mixing

A timing device should be used when mixing the impression material. A total of 10 minutes is usually required from the time of starting the mix until the impression is removed from the mouth.

Rubber base impression materials may be mixed on glass slabs but mixing pads are preferred to eliminate cleaning after use. A large pad is essential for ease of manipulation. The proportions of base and catalyst as recommended by the manufacturer are placed on the pad ready for mixing. If more working time is required slightly less of the catalyst may be used. The blade of the spatula should be coated with the catalyst before starting the mix. Incorporate the catalyst into the base material with a rotary motion until the color is uniform and free of streaks. This method will ensure that none of the base adheres to the blade to remain unmixed. After mixing, the spatula is skimmed over the mass to spread it over a wide area. Small bubbles will appear at the surface and break. The spatula is now pulled across the pad in a manner so that the material piles up on the blade. The tray should be loaded in one operation to reduce the possibility of trapping air.

The Syringe Technique

The introduction of light, regular and heavy bodied materials have allowed for some variation in technique with the use of the syringe. These materials are chemically identical but vary in colour and consistency. The aspirating type of syringe permits easy filling by removing the nozzle and filling the syringe directly from the pad or a dappen dish.

Suggested Procedure

All required materials and equipment should be in readiness before starting the mix. Two mixing pads and two spatulas will be required for the double mix technique.

1. Apply sufficient quantities of the syringe material and tray material to the mixing pads.

2. Set the timer for 10 minutes and mix the syringe material.

3. After one minute the assistant mixes the tray material while the dentist loads the syringe.

4. Remove the gingival packing, dry the teeth and tissues with cotton and introduce the syringe material.

5. The tray, loaded by the assistant, is now placed over the teeth and seated until the stops go to place.

6. Hold the tray firmly in place for at least 5 minutes, then remove from the mouth and wash the impression.

The most inaccessible and deepest parts of the preparations should be filled first. The tip of the syringe should touch the floor of the cavity. The material is built up from the gingival toward the occlusal making certain that all detail is covered. When proceeding mesial to the next abutment tooth, the syringe is not lifted but run across the crest of the edentulous ridge to the gingival border of the next preparation.

Precautions

When all prepared areas are covered, the tip of the syringe should be carried forward over an unprepared tooth before lifting off. In this way the material is not pulled away from a prepared area that might result in a void.

The material in the mouth must be unset and tacky when contacted by the material in the tray to ensure proper union. Minimum time should be lost between injection from the syringe and the seating of the tray.

Single Mix Technique

Excellent results are obtainable by using the single mix technique with either the regular or light-bodied material. An adequate quantity of the material is mixed and after loading the syringe, the remainder is applied to the tray. When the regular material is used with the syringe it is recommended that both tubes of material be cooled in water for ten minutes before using in order to retard the setting time.

Pouring

The impression should be rinsed in lukewarm water after removal from the mouth. It may be coated lightly with a surface-active agent (Debubblizer) and then dried with air before pouring with one of the hard stones. It is advisable to pour the cast as soon as possible after taking the impression. Brass [3] states that "For the enthusiast who likes to do his work on electro-plated dies, the results are even more encouraging, for the Thiokols return a silver plated die of extreme accuracy and detail and are a real thrill to work upon".

Summary

1. The Thiokols are accurate, elastic and comparatively stable impression materials.
2. They can be poured in die stone or electro-plated with silver.
3. The syringe technique greatly reduces the chance of creating voids.
4. A well organized procedure greatly facilitates the handling of these materials.
5. Custom made acrylic trays provide for a uniform thickness of impression material.
6. Hard and soft tissues should be cotton-dried prior to impression taking.
7. The model should be poured as soon as possible after removal of the impression from the mouth.

References

1. Schnell, R.J. and Phillips, R.W. Dimensional stability of rubber base materials. Am.Dent. A.J., 57:48, July, 1958.
2. Jelenko, J.F. and Co. Crown and bridge construction. 3rd ed. 1957. p 78.
3. Brass, G.A. Thiokol - A rubber base impression material. Canad.Dent. A.J. 25:746, Dec. 1959.

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No 1 Dent Eqpt Dep Operations - 1960/61 Fiscal Year

Individual items issued	-	1,671,437
Incoming and outgoing shipments	-	1,358
Number of pieces in shipments	-	10,010
Weight of shipments handled	-	359,893 lbs.

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The Military Training Programme for RCDC Officer Cadets

Lt Col DH Hillier, CD, DDS, MPH and Major JC Brick, DDS

The new Dental Officers Subsidization Plan was announced in the April issue of the Quarterly and the terms of service and benefits were outlined. However, the military training programme was not included in that article. This resume of the undergraduate course of military study, prescribed for dental officer cadets, has been prepared in order that students who are considering enrolment might understand all aspects of the new plan. In addition, it is felt that serving officers should be aware of the scope of the training which the new graduates have received and this information has not been readily available elsewhere.

A recent advertisement in the Canadian Dental Journal, which was directed toward dental undergraduates was entitled "The Best of Two Worlds as an Officer in the Royal Canadian Dental Corps". To achieve the best of each world, as an officer and as a dentist, the best training possible for each profession is a prerequisite. Dental curriculi are designed to provide the training necessary to obtain the greatest good from the dental world. Likewise, the military training undertaken during the Dental Officers Subsidization Plan, is designed to prepare the student for a successful career as an officer in the RCDC.

The training programme is divided into three phases, each of which contains a theoretical portion taken during the academic year, and a practical portion taken during the summer. The aim is to produce an officer basically well-trained, and capable of taking his place in an RCDC clinic. The fulfilment of this aim requires training which provides a broad appreciation of the role of junior officers in general, and a detailed knowledge of those functions peculiar to the RCDC.

The first theoretical phase training is conducted with the university contingent of the COTC and covers 64 periods of instruction which, as in all theoretical phases, are scheduled to interfere as little as possible with the university course. This phase serves as an introduction to the army and covers such basic features as ranks and badges, dress regulations and care of the uniform, customs of the service, pay and allowances, honours and awards and the function of the officers' mess. Certain other fundamental training is carried out, including basic drill movements and a description of the more common weapons and vehicles used in the army. A series of twenty lectures serves as an introduction to the army and to the organization, administration and characteristics of its components. The remainder of the winter's instruction deals with the qualities of leadership, the responsibilities of an officer and military law.

The candidate spends 10 weeks during the summer on First Practical Phase Training at The Royal Canadian School of Infantry (RCS of I) at Camp Borden, Ontario. Here he learns to apply and expand the principles presented during the theoretical phase and he commences the training required to become a junior officer. Although the RCDC is tri-service in employment, it is a component of the Canadian Army and therefore the RCS of I is the logical site for the basic training of dental officers. The course provides an insight into the life and role of the private soldier, the NCO and the junior officer. The cadet becomes familiar with the army life both in barracks and in the field. Through exposure to the basic elements of tactics, fieldcraft, field engineering, leadership and man-management he gains experience at all levels, from a soldier in an infantry section to a platoon commander. Included in this phase of training are lectures and exercises in first aid, map using, military law, staff duties, military writing, security, signal communications and defensive measures used in nuclear, bacterial and chemical warfare. There are 40 periods of physical training and sports to provide mental relaxation and to foster gamemanship in the young adult.

The Second Theoretical Phase which begins on return to university in the fall, is largely a review of material presented during the two previous sessions and serves to consolidate the basic military knowledge which a young officer must have. This phase completes the training known as Common to all Corps and if the cadet has applied himself he will have gained some understanding of military life. These fundamentals are common to all three services.

With this background the cadet is ready for training which is more specific to his role in the RCDC. During the next summer session, which is the Second Practical Phase, the facilities of the RCN and RCAF are used in teaching the organization, administration, customs and traditions of these services. In this way the dental officer learns what will be expected of him and how best to conduct himself when, later in his career, he is posted to a ship or station.

The RCN indoctrination takes place at the Leadership School at HMCS Cornwallis, Nova Scotia, and at HMCS Stadacona, Halifax. The time at HMCS Stadacona is devoted to practical training and, when possible, is carried out at sea.

The RCAF programme is conducted by the Central Officers' School, RCAF Station, Centralia, Ontario. A tour of RCAF Station Clinton is made during the last week of this phase.

The remaining five weeks of second phase training are taken at The RCDC School at Camp Borden. Here, during his first contact with the RCDC, the cadet is taught the organization of the Corps, dental documentation and treatment policy and the role of the dental officer in survival operations. The candidate learns clinical procedures, receives instruction in the manipulation of materials, and in the care and maintenance of instruments and equipment. This concludes the second phase and on return to university the final phase of training begins.

The Third Theoretical Phase is, as in the previous years, carried out in 64 periods. The duties of officers are covered, there are lectures on tactics with sand table exercises; and, an introduction to military history is presented, with recommended reading assignments on the careers of some of the more famous commanders.

At the close of the third dental year the officer cadet goes to The RCDC School for his final training. The aim of this phase is to raise the level of the candidate's knowledge of the Corps in general, and of the clinic routine in particular, to such a level that on graduation the new dental officer will be able to undertake his duties with a feeling of self-reliance.

The time is divided into a formal course of four weeks, and clinical duties of six weeks. The course portion reviews some of the subjects taught in the second phase such as organization and administration, dental stores, documentation and treatment policy and clinical procedures. In addition to this being a review, emphasis is placed on the practical detail of these subjects bearing in mind that the cadet will spend six weeks at clinical duties. He will have the opportunity of exercising his knowledge in treatment planning and documentation. Patients will be assigned to each cadet who will devise and carry out his own treatment plan under the supervision of the clinic instructors. Manipulation of materials, care and use of equipment, methods of sterilization, and all these subjects are no longer words and lectures, but become a part of the normal clinical routine.

In addition to the dental subjects is the ever present national survival training. The officer cadet is taught procedures for the provision of sustaining care for the seriously injured that will utilize the officer cadet's undergraduate training to the fullest extent possible. The procedures chosen are either closely

allied to, or direct extensions of, the medical, dental and para-dental subjects studied. In all, nine procedures are taught which concern: treatment of shock, control of haemorrhage, establishment of an airway, wounds of the abdomen and chest, fractures, burns, parenteral therapy and artificial respiration.

This completes the military programme for the RCDC officer cadet as there is no further training when he returns to university. On graduation and receipt of his licence to practise, the officer cadet is promoted to captain, posted to a dental company and assigned to duty in a clinic.

During his service as a cadet, the young officer has received a thorough indoctrination in the three services and in military dental subjects. He can look forward to many rewarding experiences as a dental officer with the Canadian Forces. The benefits he derives from the two professional worlds in which he finds himself will depend largely on the effort and enthusiasm that he has expended in preparing himself for each profession.

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MOUNTING CASTS WITHOUT A FACE-BOW ON THE HANAU ARTICULATOR

Sgt BPH Buchholz

A letter to the Editor which appeared in the December 1960 issue of the CDA Journal was the inspiration for this article. In his letter, the author emphasizes the importance of transferring jaw relation records by means of the face-bow and points out how infrequently dentists follow this procedure. It is understood that Dental Schools stress the importance of accurate jaw relation records with the face-bow and the Hanau articulator, the instruments of choice. Every technician in the RCDC is trained in the use of these instruments, but occasions do arise when it is necessary to work without them.

The dental technician laboratory is the right hand of the dental officer and the processing partner in the team serving the patient prosthetically. In many clinics this partnership is close; in others it is separated and only linked by "Mail Order". It is not always possible to get a proper and undistorted face-bow registration into the distant lab.

A modified Gysi method is used here to mount casts on a Hanau articulator. To do this, it is necessary to make a slight modification to the Hanau instrument to hold the occlusal plane plate in the correct position on the articulator. On the same level as the crossbar of the "H" on the vertical posts of the articulator, occlusal plane shelves are provided by creating shallow slots. A similar slot may be created on the incisal guide pin but the writer prefers attaching a support to the occlusal plane plate so that free movement is given to the upper member of the articulator as depicted at photo 1. This vertical pin is held in position by drilling a small hole to receive it. The Bonwill triangle * is engraved on the occlusal plane plate and bisected by a line running from the apex to the centre of the base. This line is used for centering the upper cast.

* Editor's Note: The Bonwill triangle is defined as an equilateral triangle bounded by lines from the contact points of the lower central incisors, or the medial line of the residual ridge of the mandible, to the condyle on either side and from one condyle to the other. It is, therefore, assumed that the sides of the triangle engraved on the occlusal plane plate are equal to the distance between the condylar elements of the Hanau articulator. It is also assumed that occlusal plane plate is positioned so that it is parallel to the base of the articulator.

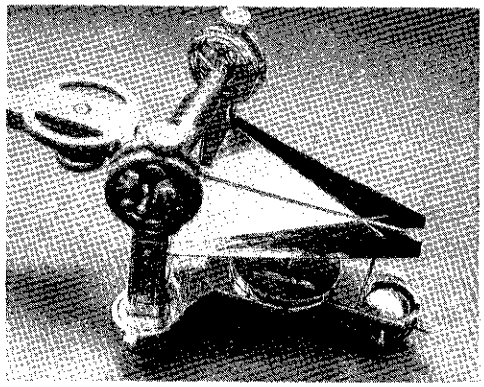

Photo 1

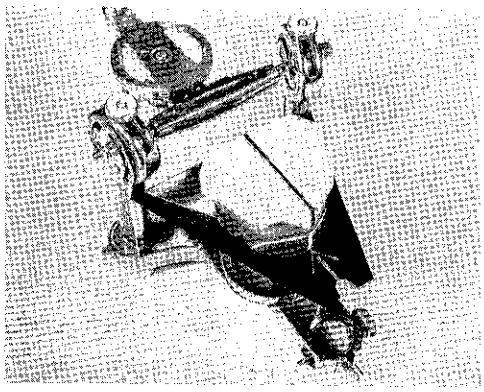

Photo 2

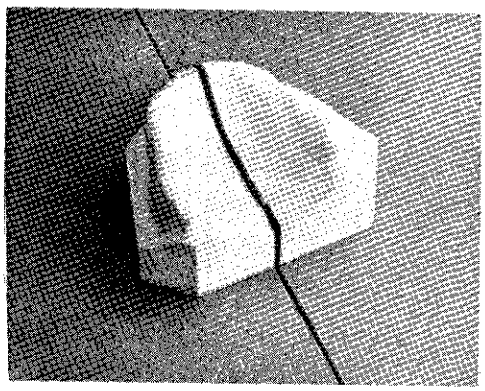

Photo 3

To mount the upper cast:

a. Extend a line upward on the cast from the median line marked on the front of the occlusal bite rim and extend it posteriorly on the flat base of the cast.

b. Draw a line through the middle of the vault along the median Palatine Suture of the upper cast and continue to the base of the cast posteriorly to indicate the posterior extension of the Palatine Suture line on the base of the cast, (photo 3).

c. Place the cast on the occlusal plane plate with the median line of the occlusal rim at the apex of the Bonwill triangle and the line on top of the cast centered along the bisecting line of the triangle, (photo 2).

d. Seal the bite rim to the occlusal plane plate.

e. Mount to the upper member of articulator.

f. When the plaster is hard, remove the occlusal plane plate and articulate the lower cast. Mount the lower cast in the normal way.

A prerequisite for this method is clearly marked, well shaped bite rims with the occlusal plane accurately established in the mouth. Although a face-bow registration by the dental officer is the method of choice for mounting casts on the Hanau articulator, good results have been achieved using the technique described.

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EXODONTISTS PLEASE NOTE!

Abulcasis (1050-1122) was the most important early Arabian author in relation to dentistry. His rules for the extraction of a tooth are very interesting:

1. First ascertain which is the aching tooth.
2. Detach the gum from the tooth with a scalpel.
3. With the fingers or with a light pair of forceps shake the tooth very gently until it is loosened.
4. Keeping the head of the patient firmly between the knees, apply a stronger pair of forceps and extract the tooth in a straight direction, so as not to pull it.
5. If as often happens, haemorrhage is produced, apply powered blue vitriol inside the wound; and if this remedy be ineffective, cauterize the part with a red-hot iron.

Hine, M.K. ed. Review of dentistry. 3rd ed. St Louis, Mosby, 1961, 576 p. (p.503)

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RESUSCITATION IN THE DENTAL OFFICE

Peter Safar. J.Am.D.Soc.Anesthes. 7:5:4-8 May 1960

Being prepared for resuscitation in the dental office requires a minimum of equipment and drugs. The dentist's skill and judgment and his practical experience in the management of unconscious patients are more important than elaborate and expensive resuscitation equipment.

The key to successful resuscitation is immediate oxygenation. Speed is more important than the concentration of oxygen in the resuscitative gas. A few effective inflations of the lungs sometimes are sufficient to restore failing circulation. Mouth-to-mouth breathing, with or without the use of adjuncts, should be learned by all dentists and physicians.

The following step-by-step outline will prepare the dentist for rapid action in the event of a respiratory or circulatory emergency:

1. An open airway is provided. The patient is placed in the supine position, his head is tilted back and his mandible is held forward to prevent pharyngeal obstruction by the tongue. If necessary, an artificial oropharyngeal airway is inserted.
2. If there are no breathing movements, mouth-to-mouth breathing is begun. The S-shaped airway is used if it is available, but time should not be wasted in looking for it. If a bag-mask unit with an anesthesia machine or an oxygen cylinder is available, another person should be asked to get it ready while the practitioner performs mouth-to-mouth breathing.
3. If the patient's lungs cannot be inflated, the pharynx should be checked for foreign matter. If there is solid foreign matter in the pharynx, the pharynx should be cleared with fingers or a cloth.
4. If there is still obstruction, probably it is caused by laryngospasm. Laryngospasm often can be treated successfully by an increase of inflation pressure. If this fails, the practitioner can perform orotracheal intubation or tracheotomy (if sufficiently trained to do so). Then the lungs are inflated by blowing intermittently into the tube. Blind nasotracheal intubation is not suitable for resuscitation.
5. If after a few lung inflations the patient still is apneic and a pulse cannot be felt in the carotid artery, the sternum is pressed forcefully and repeatedly against the patient's back, between lung inflations. This may squeeze the heart sufficiently between sternum and vertebral column to move blood. If the accident occurs in the hospital and there is a competent assistant, "open chest cardiac massage" (left anterior thoracotomy with manual systole) is indicated, but this should not be attempted in the dental office unless the operator is surgically trained and equipment for hemostasis and closure of the chest is available.
6. If the patient is breathing adequately, but his blood pressure is low or unobtainable, a vasopresser drug is injected intravenously, and the patient is placed in a supine position with the head lowered.
7. In the event of convulsions, adequate pulmonary ventilation is provided first, then a small dose of a short-acting barbiturate is injected intravenously.

Editor's Note: Reprinted from the Dec 60 issue of Dental Abstracts by kind permission of the editor, Dr. Lon W. Morrey.

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DENTAL STORES

During 1949 it was found that 142 amalgams were placed for each 5 oz bottle of alloy issued; 0.8 operations, which normally require a local anesthetic, were performed for each carpule issued; and 1.3 X-ray films were issued for each radiograph reported.

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FORT CHURCHILL

Major JW Jolly, DDS

Fort Churchill, Manitoba is located on the sunny, rocky shore of Hudson Bay, slightly north of the 58th parallel, in Canada's sub-arctic regions. It is approximately six hundred miles north of Winnipeg, near the mouth of the Churchill River. The town of Churchill, the only other inhabited area within one hundred miles of the fort, is about four miles away by road.

The first Fort Churchill was built in 1689 and destroyed by fire soon afterwards. In 1731 Fort Prince of Wales was built at the mouth of the Churchill River, where it still stands as an historic landmark. Fort Prince of Wales can be visited by personnel in Churchill by boat in summer, by snowmobile or dog team in winter. The Hudson's Bay Company has had a trading post at Churchill for over three hundred years. The present Fort Churchill was established in 1942 as part of an air route to the UK and was taken over by the Canadian Army in 1946 as a joint services cold weather experimental and training base.

Churchill is Manitoba's seaport from which prairie grain is shipped to Europe during the shipping season from August to October. It is also a main supply point for the eastern Arctic regions.

At present Fort Churchill is staffed by elements of the RCN, CA(R), RCAF, US Army, USAF, Defence Research Board and Department of Transport. Command and administrative control is held by the Canadian Army. All of these services are stationed here to carry out cold weather experimentation and research on various types of equipment and/or training of troops in Arctic warfare.

During the International Geophysical Year, Fort Churchill was chosen as a location for experimental rocket launchings to gather atmospheric and radiation data. This work has been carried on by joint teams of US and Canadian forces and the Defence Research Northern Laboratories until very recently, when a disastrous fire demolished a large portion of the launching area and many valuable instruments. The research teams expect to be back in business in the near future with new and better equipment at their rebuilt site about twelve miles away from the main camp.

It is well known that the weather at Fort Churchill bears little resemblance to that of Florida. The cold and windy climate makes it ideal for testing men and equipment for Arctic employment. Last winter the lowest temperature was forty degrees below zero and the highest windchill (a figure combining wind velocity, temperature, humidity and a few other variables) was 2300. This sounds very unpleasant, but one rapidly becomes accustomed to the cold and learns to dress for protection. In early February, the temperature rose to four above zero and everyone complained of the unseasonable hot spell.

The camp, as can be seen in the cover photo, is situated on a rocky bluff, one hundred feet above sea level and several miles north of the tree line. It is laid out in a compact manner and many of the buildings are connected by heated corridors. It is seldom necessary to go more than three hundred feet in the open air when the weather is really bad. The photo shows in the foreground the RCAF hangar and most of the PMQs; in the middle distance the single quarters, the administrative and working areas and on the right the rocky shore and the frozen bay; in the background top left is HMCS Churchill and the rest is frozen river and tundra.

The camp is well supplied with most of the amenities of life. The two notable exceptions are a swimming pool and a large gymnasium. The DND School has a

small gym but this cannot be used for sports during school hours. Facilities are available for most popular sports and are put to good use. The Garrison Theatre has a new show every night. There are various hobby clubs; a woodworking shop; the craft shop for leather work, painting, photography and ham radio. The local radio station, CHFC, provides news, weather, recorded programs and coverage of major sporting events. The messes, clubs and canteens have very busy schedules and the social life is far more active than on normal stations despite the weather.

Service personnel are provided with environmental clothing for protection from the weather. They consist of parka, wind pants, shearling-lined snow boots and double mitts. The parka is a necessity, the rest need only be worn if one is outside longer than fifteen minutes or if the wind is extremely high. One other occasion for wearing this clothing is during Arctic indoctrination training.

The camp runs a one-week course in Arctic survival for staff personnel who are medically fit and volunteer to attend. The course consists of three days of lectures, demonstrations and films on navigation, use of Arctic equipment, snow-shoeing, building various types of shelters (snow caves, igloos and lean-tos), and other subjects related to Arctic survival, followed by two days of practical application of this knowledge out on the tundra. Everyone takes a turn at navigating, pulling a loaded toboggan, building shelters, cooking, chopping wood for fires and ice for water, cutting snow blocks for building and various other healthy, strenuous jobs in the below zero open air. It's a rugged course but well worthwhile. Four of our clinic staff have participated this winter and all survived despite the odd bit of frostbite, lack of sleep and far more strenuous exercise than normal.

Now from the tundra we turn to "civilization" in the form of the town of Churchill which has about 1800 inhabitants, including the Eskimoes and Indians who live in two camps under the guidance of the Federal government. Churchill boasts two hotels, a liquor store, Hudson Bay store, a semi-supermarket, several stores selling hardware, housewares, furniture and clothing, a bakery, the railroad station, the grain elevator, Canadian Legion Hall and little else of great consequence. The most interesting place in town is the Eskimo museum, which has been set up largely by a lay brother of the RC mission. This museum contains many interesting Eskimo carvings, implements, articles of clothing and hundreds of other objects showing the culture of the Eskimo. At times it is possible to see dog teams driving along the town streets, Eskimoes in colourful native garb and trappers in from their trap-lines. A local character, "Trapper Joe", lives with his dogs, about fifteen miles south of Churchill beside the railway line. Joe has lived in this area for more than forty of his eighty-one years. He is a huge man and looks far younger than he actually is; he loves to have people visit at his cabin and will talk at length about life in the Arctic to any who are interested.

Now a few lines about the clinic. Unlike most other clinics dependents as well as service personnel are eligible for treatment. Also, since the nearest civilian dentist is five hundred miles southwest at The Pas, all the civilians, Eskimoes and Indians from northern Manitoba and the Northwest Territories are potential patients. This occasions an opportunity for the dental officers to enjoy a very diversified general practice. All the detail concerning treatment records, separate monthly returns for various classes of patients, collection of fees from other government departments, that are shown in the Manual of Dental Services are routine at Fort Churchill. Whereas the monthly returns at many clinics consist of several sheets of paper, here they weigh several pounds. Not only is the dental practice diversified but this posting also affords excellent training in administration.

In conclusion, a posting to Fort Churchill is just what the individual makes it. The work is interesting and diversified, the life is different but enjoyable and while the weather is wild it is not really unpleasant. All things considered, Fort Churchill is quite a good posting.

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THE ADAPTATION OF THE HYDROCOLLOID SYRINGE FOR RUBBER BASE IMPRESSION MATERIALS

Capt OA Tucker, DDS

With the advent of new and easier-handling impression materials, the hydrocolloids have fallen into disuse, but the cartridge syringe that is on issue for use with hydrocolloids can be adapted, very readily, for use with medium or light-bodied rubber-base impression materials. With some modification in the mixing technique the results have been very satisfying.

Adaptation of the Syringe - (Hydrocolloid)

1. Remove the rubber insulating cover of the syringe and the syringe tip.

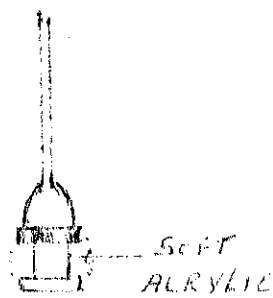
2. Take a 13 gauge needle and cut it off with a disk about one inch from the hub and trim the cut end. (A 13 gauge spinal needle can usually be obtained from the CFMS)

3. Mix some quick cure acrylic and let it stand until it becomes putty-like in consistency.

4. Pack acrylic around the hub of the needle as in figure 1 and insert the hub into the threaded end of the syringe barrel, figure 2. To facilitate removal ensure that the square part of the hub projects above the end of the barrel about 2mm. To force the acrylic into the thread of the barrel, and obtain good adaptation of the acrylic, apply a balanced pressure with the plunger of the syringe and at the same time hold the needle firmly. When the acrylic has partially set, immerse the syringe in hot water to hasten setting.

5. Remove the needle from the syringe barrel by unscrewing and trim the acrylic as necessary.

6. Bend the needle to any desired angle.



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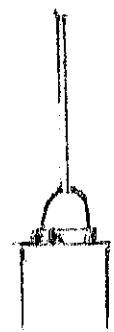


2

Mixing the Impression Material

1. Before mixing, immerse the two tubes of impression material, glass slab and spatula in cold water and leave for at least ten minutes.

2. Extrude one unit of the white material and three-quarters of a unit of the brown on a cold glass slab. The actual amounts depend on the number of preparations to be covered, but make sure there is enough for both the syringe and the tray.

3. Stir the material with a pen grip until an even consistency is achieved. The manufacturer suggests a 45-second mixing time.

4. To load the syringe, remove the needle, pile the impression material into a heap and place the open end of the barrel into the material and draw up on the plunger. To get better suction in the syringe a coating of silicon grease or vaseline on the plunger washer will help.

5. Wipe off the barrel and screw the needle into it until tight. The syringe is now ready for use. This mixing technique provides a working time of up to 2½ to 3 minutes, which will be slightly reduced in warmer weather.

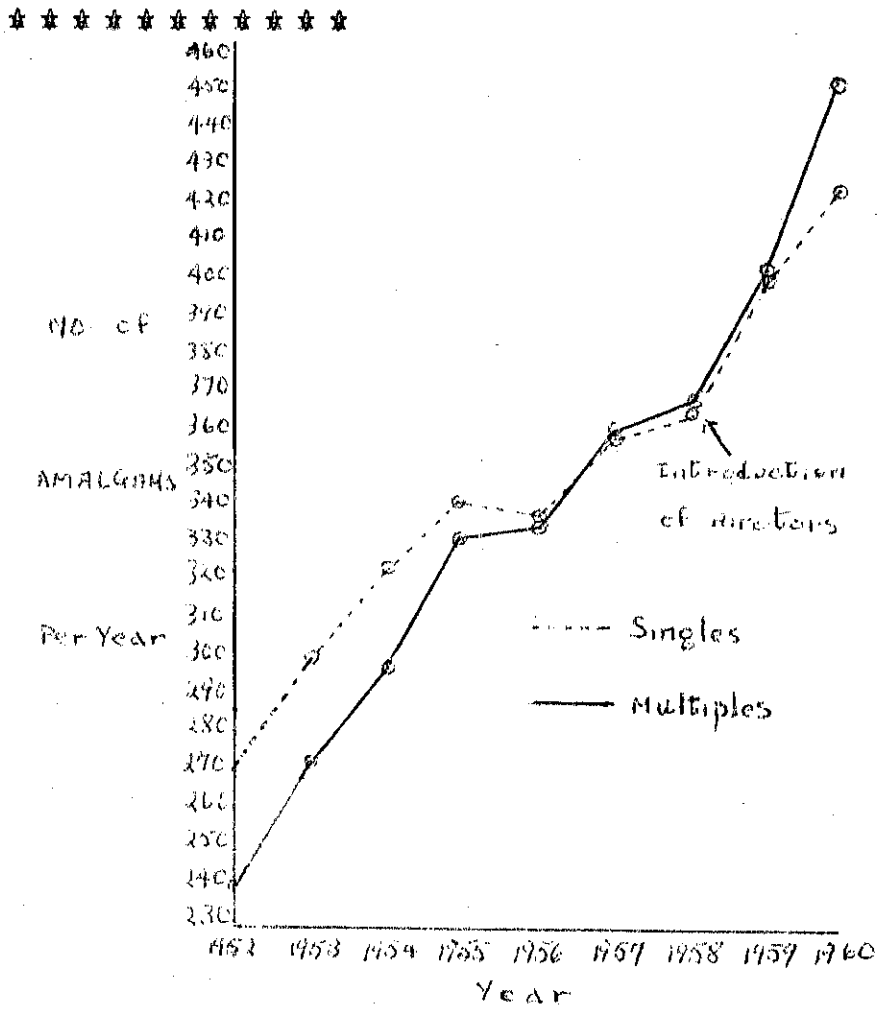
Cleaning

1. Immediately after use, have the assistant remove the needle and immerse the syringe, needle, and anything else which may have impression material on it, into warm water to hasten setting.

2. Once set, pull the core of material out of the barrel of the syringe. This may be done easily by using a corkscrew from a silicate liquid bottle. The barrel should then be thoroughly cleaned.

3. To clean the needle, carefully pull the material out. If the needle becomes clogged, a barbed broach is used to remove the material and if this is not successful, replace the needle on the syringe, fill with water and force the plunger down. This usually expels any remaining material.

Progress in Amalgam Production Per Clinically Employed Dental Officer Per Year - 1952-60



LETTERS TO THE EDITOR

Gas-Producing Agents in Apicoectomy Technique

Editorial Board, RCDC Quarterly:

First may I congratulate the Editorial Board on the current issue of the Quarterly. It is improving noticeably with every issue.

If an "old Timer's" professional opinions carry any weight with the younger generation I would like to offer a word of comment on Susser's article re "Apiectomy of Anterior Teeth" on page 18.

In Phase 1 - Root Canal Filling, he advocates flushing the canal with Hydrogen Peroxide 3%. This is fine in cases where no apiectomy is required i.e., where the apical foramen is filled with vital tissue or blood clot. However, as the article refers specifically to cases in which an apiectomy is indicated, it can be assumed that there is an area beyond the apex, the contents of which are unknown.

If in the course of preparation with broaches and files an opening is made through the apical foramen into this area, and if, subsequently some 3% Hydrogen Peroxide gains access to this area and the necrotic material or pus it often contains, the resulting sudden production of a large quantity of gas can produce some very spectacular phenomena in the way of pain and possibly spread of the infection, particularly, if the foramen plugs.

I would suggest that either a non-gas producing flushing agent be used or the flushing with peroxide be carried out with the apiectomy area opened. I know that this sequence of events does not happen often, but when it does the operator will never forget it, believe me! As this risk is avoidable I thought my word of caution might not be out of place.

Colonel TL Marsh

Editorial Board, RCDC Quarterly:

In reply to Colonel Marsh

Upon reading Colonel Marsh's comments, I thoroughly re-examined the technique described in the Quarterly and could find little fault, except perhaps in its presentation. I outlined phase I in one short paragraph as I was trying to stress phase II, i.e., resection and periapical curettage and assumed that the method of filing, flushing and filling the canal would be understood. I have used this technique for the past nine years, with a few variations, and have noted no adverse phenomena.

The article states that hydrogen peroxide and sodium hypochlorite solutions are used to flush the canal. Perhaps I was not explicit enough, in failing to state that these were used alternately and did not outline the method and armamentarium involved.

I would like to quote another "old timer", Dr. Louis I. Grossman in his third edition of "Root Canal Therapy" page 223, "To make removal of debris from the root canal more effective, irrigation may be carried out alternately with chlorinated soda solution and hydrogen peroxide. About 0.5 ccs. of one solution is followed by a similar amount of the other, alternate irrigation being continued until the canal has been completely cleansed of debris. The alternate use of these solutions will cause prompt effervescence and help to force the debris toward the widest part of the canal i.e., toward the pulp chamber. There is no danger of forcing debris apically if the syringe

needle fits the canal loosely since the force of the effervescence will follow the line of least resistance, namely, toward the mouth of the canal and into the pulp chamber." $H_2O_2 + NaOCL \longrightarrow NaCl + H_2O + O_2$). As H_2O_2 also liberates oxygen on contact with debris in the root canal it is reasonable to expect that the foaming action will force debris toward the mouth of the canal as described by Grossman.

Many other agents used in flushing the root canal are also gas producers, viz., sodium hypochlorite used alone liberates chlorine; so does azochloramide which does so perhaps more slowly. I see no reason to cease using these gas producing agents so long as the technique is correct.

It is agreed that it would be unwise to introduce any gas producing agent into a canal where pus is present but this is not done. There is really no great mystery as to the contents of a periapical area. If pus is present, it will usually well up and flow out when the chamber and root canal are opened. Presence of pus indicates necrosis and in these cases, the canal is left open to drain for several days until drainage has ceased. We can then safely assume that granulation has commenced and if the tooth is asymptomatic proceed with the root canal treatment of choice. It must be pointed out that granulation tissue is not necrotic but is in fact an effort at healing. The formation of a granuloma is indicative of a defensive reaction on the part of the periapical tissue (Schour). Granulation tissue is hard to infect because it is mobilized to meet bacterial invasion (Boyd Textbook of Pathology). Although a small radicular cyst cannot always be differentiated on X-ray from a granuloma; in most cases such differentiation is possible. Thus the operator in most instances can know the type of periapical tissue he has to deal with.

I have tried the technique of opening into the periapical area before treating the root canal and have found it messy. It is very difficult to establish a clean, dry canal with blood from the periapical area seeping into it.

In conclusion may I thank the editorial board for their fine editing of my article so as to make it readable. It is unfortunate however, that the X-rays submitted could not be printed as they would substantiate the technique more than a thousand words.

Major IW Susser

In Support of Replantation

Editorial Board, RCDC Quarterly:

With reference to the article "The Case for Replantation" by Major DE McDermott and Capt WF Shaw in the Royal Canadian Dental Corps Quarterly, Volume 2 Number 1, April 1961, I report a case of interest. It concerns the replantation of the upper right central incisor for Sgt Garbutt KC, SB 153350. I replanted this tooth in Aug 1949 at Camp Borden. In Oct 1959 I received a letter from Major JC Hughson, retired, and I quote, "Clinically, the tooth is slightly discoloured, but is otherwise symptomless. There is good gingival attachment and it was impossible to probe into the radiolucent areas on the mesial and distal."

Major AG Andrews

Editor's Note: Letters to the Editorial Board are welcome and will be published if they are of general interest to members of the Corps.

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NEW OFFICERS IN THE CORPS

A special welcome is extended to our ten new officers. It is hoped that their stay in the Corps will be a happy one and that many will see fit to make the RCDC a permanent career.

Capt MA Abramson, DDS, a Toronto graduate, has been posted to No 12 Coy and is employed at HMCS Cornwallis. Although born in Montreal, Capt Abramson spent most of his life in the United States and completed three years of dentistry at the University of Pittsburgh before transferring to U of T for his final year.

Capt HW Brogan, DDS, of Minto, N.B. is a Dalhousie graduate and commences his career with No 14 Coy at Fort Churchill.

Capt MN Deyette, DDS, a native of Parry Sound, Ont graduated from the University of Toronto and is posted to Camp Petawawa.

Capt JGB Dionne, BA, DDS, of Montreal and a graduate of the University of Montreal will start his career in the far west at RCAF Station Comox, B.C.

Capt AG Garden, DDS, of Saskatoon and Rolling Hills, Sask is the only University of Alberta graduate amongst the new officers. He has been posted to 11 Coy and will be employed in Calgary.

Capt JFA Marcil, BA, DDS, of Montreal and a graduate of Montreal has been posted to Montreal.

Capt KSM Mathers, DDS, of Kitchener, a University of Toronto graduate, has been posted to RCAF Stn Rockcliffe.

Capt AL Moran, DDS, a native of Port Arthur and a graduate of the University of Toronto starts his career at RCAF Station, Downsview, Ont.

Capt RJ Paturel, BSc, DDS, of Halifax and a Dalhousie graduate is posted to another seaport, Fort Churchill.

Capt PP Prud'Homme, BA, DDS, of St Jerome, Que graduated from the University of Montreal and has been posted to Camp Valcartier.

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RETIREMENTS AND RELEASES

During the three months since the last issue of the Quarterly, a number of officers and men have reached retirement age or have taken releases from the Corps to enter private practice. Although we are sorry to see them go, all members of the Corps wish them happiness and success for the future.

Retirements

Col HL (Hum) Harris, CD, DDS, QHDS, who vacates the appointment of Director of Dental Services (Navy) in the Directorate of Dental Services has been with the Corps for 22 years. He was born in Freeport, N.S. and educated in Yarmouth, N.S. and at Dalhousie University. He obtained his DDS degree at McGill in 1934 and following a year's internship in Oral Surgery in Montreal hospitals, entered private practice in Kentville, N.S.

Commissioned in the CDC in November 1939, he proceeded overseas in 1942 and saw service in the UK and Northwest Europe. On his return to Canada in 1945 he was posted to Vancouver, B.C. Since the war he has held various appointments in Ottawa, Trenton and Halifax. He was promoted Lt Col in 1949 and to his present rank in 1956.

Col Harris who is married with two children has accepted an appointment as Chief Dental Officer of the Department of Education in London, Ont.

Col TL (Tommy) Marsh, CD, DDS, DDPH, at the time of his retirement was Command Dental Officer Quebec Command and Commanding Officer, No 15 Dental Coy, Montreal. He has seen 19 years' service with the Corps. Born in England, he moved to Canada at an early age. He received his dental education at the University of Toronto in 1932 and attended the same university again in 1952 to receive his DDPH.

He enrolled in the CDC in 1942 and during the war served in Canada and the UK as well as at sea aboard HMCS Warrior. Since the war he has served as an instructor at The RCDC School, as Commanding Officer of No 1 Field Dental Coy in Germany, Dental Public Health Officer at Army Headquarters and assumed his present appointment in 1958. Active in medical and dental research, Col Marsh is a member of the American Medical Editors and Authors Association, Member of the Executive Council of the Toronto Academy of Dentistry, Past President of the Alumni of the Newman Club, U of T, as well as having a wide interest in journalistic and research committees.

Col Marsh who is married with two children has accepted a civilian post with the Provincial Government of Manitoba and will reside in Winnipeg.

Capt NS (Norm) Gage, CD, DDS, who prior to his retirement was dental officer at Royal Military College, Kingston, has served 16 years with the Corps. He was born in Kingston and received his public and high school education there and graduated from the University of Toronto with his DDS in 1933, following which he returned to Kingston to enter private practice. He enrolled in the CDC in 1939 and during the Second World War served in Canada, UK and Northwest Europe until December 1945. He was then employed by the Department of Veterans Affairs in Kingston until 1951 when he was again commissioned in the Corps and since that time has had postings in Prairie and Central Commands.

Capt Gage who is married with one daughter has accepted a hospital appointment in Kingston with the Provincial Government of Ontario.

Releases

The following officers have entered private practice on completion of their tours of duty with the Corps:

Capt	JS	Davis
Capt	CJL	Dorval
Capt	LA	Reynolds
Capt	GG	Tremblay

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POSTINGS

Summer time is posting time and this year is no exception in the Corps. The following movement of personnel has taken place since the last issue of the Quarterly:

Colonel BP Kearney formerly Commandant, The RCDC School has been posted to Edmonton as Command Dental Officer, Western Command and Commanding Officer, No 11 Coy.

Colonel IAL Millar formerly CO No 11 Coy has replaced Colonel HL Harris on the staff of the Directorate of Dental Services in Ottawa.

Colonel CE Purdy has vacated the appointment of CO No 14 Coy and is now Commandant, The RCDC School.

Lt Col JG Butler has been posted from the Directorate of Dental Services' staff to become Command Dental Officer, Quebec Command and CO No 15 Coy.

Lt Col GR Covey who has been CO No 35 Fd Dent Unit in France for the past three years replaces Lt Col Butler on the Directorate Staff.

Lt Col LG Craigie has been posted to command No 35 Fd Dent Unit following five years as an instructor in operative dentistry at The RCDC School.

Lt Col RB Jackson formerly the Senior Dental Officer in the Ottawa area has been appointed Commanding Officer of No 14 Coy.

Maj	FD	Charman	-	to 35 Fd Dent Unit from Griesbach Bks, Edmonton
Maj	RA	Fell	-	to Goose Bay from HMCS Naden, Esquimalt, BC
Maj	IAC	MacDonald	-	to Calgary from 35 Fd Dent Unit
Maj	JCE	McDonald	-	to Edmonton from CBUME
Maj	FM	Nesbitt	-	to RCSME, Chilliwack, BC from RCAF Stn Winnipeg
Maj	LA	Richardson	-	to RCAF Stn Winnipeg from RCAF Stn Namao, Edmonton
Maj	EJC	Small	-	to CBUME from Oakville, Ont
Maj	JM	Smith	-	to Treatment Wing, The RCDC School from Goose Bay
Capt	JF	Begin	-	to RCAF Stn Goose Bay from Quebec City
Capt	GIJ	Bisaillon	-	to 14 Coy from 4 Fd Dent Coy in Germany
Capt	RD	Bunt	-	to CBUME from Winnipeg
Capt	JF	Eadon	-	to RCAF Stn Penhold from Fort Churchill
Capt	BA	Gaudet	-	to Quebec City from CBUME
Capt	LC	Gray	-	to Vancouver from Calgary
Capt	RH	Headley	-	to 4 Fd Dent Coy from RCAF Stn Parent, Que
Capt	MAJ	LaChapelle	-	to HMCS Bonaventure from Camp Petawawa
Capt	HK	Meisner	-	to 35 Fd Dent Unit from HMCS Cornwallis
Capt	DJ	MacPhee	-	to 4 Fd Dent Coy from RCAF Stn Downsview
Capt	M	Petryk	-	to Calgary from RCAF Stn Cold Lake
Capt	JCRR	Roy	-	to RCAF Stn Parent from Montreal
Capt	JJY	Turcotte	-	to 35 Fd Dent Unit from RCAF Stn Goose Bay
Lt	HF	Doyle	-	to 14 Coy HQ, Winnipeg from Camp Petawawa
Lt	EL	Proudfoot	-	to 11 Coy HQ from the Directorate of Dental Services, Ottawa
WO1	TA	Jones	-	to DGDS, Ottawa, from Winnipeg
WO1	WD	Morris	-	to 1 Dent Eqpt Dep, Petawawa from The RCDC School
WO2	JR	Card	-	to 14 Coy HQ, Winnipeg from DGDS, Ottawa
WO2	MB	Fisk	-	to DGDS from Camp Petawawa
WO2	WW	McMichael	-	called out HMCS Naden, Esquimalt, BC
WO2	RWM	Hall	-	to RCDC Schl from No 1 Cl, AFHQ, Ottawa

WO2	EC	Carpenter	- to The RCDC Schl from 11 Coy QM Stores, Calgary
WO2	JE	Shiner	- to HMCS Cornwallis from No 1 Cl, AFHQ, Ottawa
Ssgt	MF	Conkey	- to 11 Coy QM Stores, Calgary from Camp Petawawa
Sgt	DD	Casson	- to RCAF Stn Moose Jaw from Winnipeg
Sgt	WF	Chase	- to Camp Gagetown from HMCS Bonaventure
Sgt	RD	D'Eon	- to 4 Fd Dent Coy from HMCS Naden, Esquimalt, BC
Sgt	DLG	Flesher	- to 4 Fd Dent Coy from DGDS, Ottawa
Sgt	RG	Hopkins	- to RCAF Stn St Jean, Que from Camp Petawawa
Sgt	VR	Kidd	- to Whitehorse from Edmonton
Sgt	HC	Kirby	- to HMCS Cornwallis from HMCS Stadacona, Halifax
Sgt	EE	Mazerall	- to Pers RCDC, Ottawa from Edmonton
Sgt	JM	Moore	- to Calgary from Whitehorse
Sgt	FK	McKay	- to HMCS Bonaventure from Camp Gagetown
Sgt	MO	McDonald	- to 4 Fd Dent Coy from RCAF Stn Goose Bay
Sgt	RH	Palmer	- to Edmonton from 4 Fd Dent Coy
Sgt	SE	Robertson	- to RCAF Stn Goose Bay from Workpoint Bks, Esquimalt
Sgt	AJ	Tait	- to Camp Petawawa from RCAF Stn Centralia
Sgt	JM	Tapp	- to RCAF Stn St Jean, Que from The RCDC School
Sgt	HEW	Reid	- to CBUME from HMCS Cornwallis
Sgt	SM	Toole	- to HMCS Naden, Esquimalt from 4 Fd Dent Coy
Sgt	JA	Shields	- to Esquimalt from 4 Fd Dent Coy
Sgt	G	Shechosky	- to Winnipeg from Saskatoon
L/Sgt	G	MacCuish	- to HMCS Stadacona from CBUME
Cpl	JIJ	Boulanger	- to CBUME from Longue Pointe, Montreal
Cpl	JWW	Broomfield	- to RCAF Stn Cold Lake from CBUME
Cpl	HK	Drawe	- to CBUME from Edmonton
Cpl	PJ	Dumas	- to Camp Petawawa from RCAF Stn Trenton
Cpl	EA	Duve	- to Camp Petawawa from Calgary
Cpl	P	Fox	- to Esquimalt from Edmonton
Cpl	SG	Harmer	- to Vancouver from CBUME
Cpl	EJ	Lansey	- to 4 Fd Dent Coy from Quebec City
Cpl	CM	Martell	- to CBUME from HMCS Stadacona
Cpl	SR	Monahan	- to RCAF Stn Cold Lake from The RCDC School
Cpl	AF	Randall	- to HMCS Stadacona from HMCS Cornwallis
Cpl	GD	Schwarze	- to Whitehorse from Edmonton
Pte	RL	Geddes	- to Camp Petawawa from Camp Ipperwash
Pte	BA	Green	- to Edmonton on transfer from the C Pro C
Pte	PA	McCoy	- to HMCS Naden on transfer from 1 Bn PPCLI
Pte	DH	McKay	- to RCAF Stn Trenton on transfer from PPCLI Depot
Pte	PD	Peterson	- to Camp Gagetown from RCAF Stn Cold Lake
Pte	WW	Webster	- to RCAF Stn Penhold from Edmonton

Airwomen

LAW	EE	Dennis	- to RCAF Stn Goose Bay from RCAF Stn St Jean
LAW	ML	Dubuc	- to RCAF Stn Greenwood from Goose Bay
AW1	DF	Adams	- to RCAF Stn Cold Lake from St Jean
AW1	CMR	Barbor	- to RCAF Stn Aylmer from St Jean
AW1	DL	Carroll	- to RCAF Stn Trenton from St Jean
AW1	JM	Giacobbo	- to RCAF Stn Camp Borden from RCAF Stn Parent
AW1	DJ	Hollins	- to 35 Fd Dent Unit from St Jean
AW1	KY	Keddy	- to RCAF Stn Summerside from Goose Bay
AW1	MG	Poulson	- to RCAF Stn Camp Borden from St Jean
AW1	ME	Reddy	- to RCAF Stn Trenton from St Jean
AW1	A	Skubiak	- to RCAF Stn Winnipeg from Parent
AW1	HI	Walko	- to RCAF Stn Portage la Prairie from St Jean
AW1	LA	Wiens	- to RCAF Stn Goose Bay from St Jean
AW1	LP	Yakemchuk	- to RCAF Stn Parent from RCAF Stn St Hubert

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PROMOTIONS

Congratulations are extended to the following officers and men on their recent promotions:

Lt Col	CE	Purdy	- promoted to	Colonel
Lt Col	AT	Roger	- " "	Colonel
Maj	DH	Hillier	- " "	Lt Col
Maj	G	MacDougall	- " "	Lt Col
Capt	JI	Gordon	- " "	Major
WO 1	EA	Church	- " "	Lt
WO 2	WD	Morris	- " "	WO 1
Ssgt	EK	Abernethy	- " "	WO 2
Ssgt	AJ	Arsenault	- " "	WO 2
Ssgt	AJ	Greco	- " "	WO 2
Ssgt	SL	MacLean	- " "	WO 2
Ssgt	EB	Morse	- " "	WO 2
Ssgt	JM	Sherry	- " "	WO 2
Sgt	EMB	Everett	- " "	Ssgt
Sgt	GEC	Bradley	- " "	Ssgt
Cpl	FK	MacKay	- " "	Sgt
Cpl	RF	Matheson	- " "	Sgt
Cpl	EL	Schell	- " "	Sgt
Cpl	GW	Wilkinson	- " "	A/Sgt
Cpl	GH	Taylor	- " "	A/Sgt
Cpl	KPH	Buchholz	- " "	A/Sgt
Cpl	G	MacCuish	- " "	L/Sgt
Pte	GD	Schwarze	- " "	Cpl
Pte	GM	Wadden	- " "	Cpl

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35 FD DENT UNIT

Marriages:

Cpl ME Clark was married to LAC D Jensen on 3 Jun 61.

Births:

To Major and Mrs AL Kelland on 22 Apr 61, a daughter, Laura Jane.

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TRAINING

During the period since 1 May covered by this issue of the Quarterly, Corps personnel have successfully completed a variety of training as follows:

US Naval Dental School, Bethesda, Md

Maj	ED	McDermott	- 12 Coy	- Crown & Bridge	-	5 days
Capt	HG	Bunston	- 12 Coy	- Complete Dentures	-	5 days
Capt	JT	Marshall	- 12 Coy	- High Speed Orientation	-	5 days

The RCDC School

Dental Technician Clinical - Group 3

Sgt	HEE	Franzgrote	- 11 Coy
Sgt	RG	Pelletier	- 12 Coy
Sgt	JM	Tapp	- 13 Coy

Dental Technician Laboratory - Group 1

Cpl	JC	Bleakney	- 12 Coy
Cpl	EB	Borden	- 13 Coy
Cpl	H	Chamberlain	- The RCDC School
Cpl	G	Dancer	- 15 Coy
Cpl	PAP	Hughes	- 12 Coy
Cpl	SR	Monahan	- 11 Coy
Pte	CS	Sabine-Pasley	- 13 Coy
Pte	RH	Stenabaugh	- 13 Coy
Cpl	AE	Werkmann	- 15 Coy

Dental Assistant - Group 1

Pte	OW	Mandrusiak	- 13 Coy
Pte	DB	Loosely	- 13 Coy
Pte	A	Pink	- 12 Coy
Pte	WW	Webster	- 11 Coy
LAW	EE	Dennis	- 15 Coy
AW1	KY	Keddy	- 15 Coy
AW1	LP	Yakemchuk	- 15 Coy
AW1	LA	Wiens	- 15 Coy
AW1	FR	Peck	- 15 Coy
AW1	GT	Coen	- 12 Coy
AW1	YML	Fournier	- 13 Coy
AW1	MJD	Fisher	- 13 Coy
AW2	MR	Thibault	- 15 Coy

Dental Assistant - Group 1 (cont'd)

AW2	DL	Carroll	- 15 Coy
AW2	ME	Reddy	- 15 Coy
AW2	HI	Walko	- 15 Coy
AW2	DF	Adams	- 15 Coy
AW2	CMR	Barbor	- 15 Coy

The RCASC School

Senior NCO Course

A/Sgt	GH	Taylor	- 11 Coy

Command Junior NCO School

Jr NCO Course

A/Cpl	GD	Schwarze	- 11 Coy

CFMSTC

First Aid Instructor (Tri-Service)

Cpl	WA	Jackson	- The RCDC School

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DIRECTORATE NEWS

Brigadier Baird Visits Europe

Brigadier KM Baird, Director General of Dental Services and Mrs Baird returned to Canada on 14th July following a month in Europe. During this tour, the Director General inspected RCDC facilities and interviewed officers and men of No 35 Fd Dent Unit and No 4 Fd Dent Coy. He also presented a paper to the Armed Forces Dental Services Commission of the Federation Dentaire Internationale in Helsinki, Finland and visited London to confer with Major-General H Quinlan, Director of Army Dental Service, RADC, Surgeon Rear-Admiral (D) W Holgate, Director of Dental Services, RN, and Air Vice-Marshal R Scoggins, Director of Dental Services, RAF.

Farewell Party for Col Harris

The Army Headquarters Officers' Mess was the site for a farewell party on 26th May tendered Col and Mrs "Hum" Harris by officers of the Directorate and clinics in the Ottawa area and their ladies. The popularity of the Harris' was reflected in the large turnout of local officers and the presence of militia officers and visitors from 13 Coy, 15 Coy and The RCDC School.

Following a short speech, Brigadier Baird presented, on behalf of the officers present, a suitably engraved rose bowl and the set of dice used to determine postings for Corps personnel.

Col and Mrs Harris are now vacationing in Nova Scotia prior to their move to London in August.

Col Millar in Camp Borden

Col IAL Millar visited Camp Borden recently to interview undergraduates taking summer training at The RCDC School.

Maj Brick to Gagetown

Maj JC Brick spent three days in Camp Gagetown in July to observe Corps operations in the field.

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RCDC SCHOOL NEWS

School Wins Meds-Dents Volleyball Championship

On 2nd March The RCDC School Volleyball Team won the 1960-61 Medical-Dental Intra-Mural Volleyball Championship. The six-team league operated through the winter months with games being played on Thursday afternoons. Stiff opposition was provided by two or three of the Medical teams but the stalwarts in green warded off all contenders to finish first in the league standings. In the semi-finals and finals 4 Fd Amb RCAMC threatened to take the laurels away but the Dentals rallied and were not to be denied.

Congratulations to the team on such a fine season and for adding the Volleyball Trophy to the School's list of achievements in sports around Camp Borden.

Front Row L to R

Bill Jackson, Jack Jones, Glen Jennings

Back Row L to R

Arnold Semple, Marcel Tapp, George Bradley, Tom Batten

RCDC School Annual Golf Tournament

Thursday, 25th May saw a new champion crowned as once again the staff of The RCDC School took to the fairways for their Annual Golf Tournament. At the end of the first nine, it was apparent that an upset was in the making as our perennial "Pro" Capt Chas Casterton was off his usual form and when the scores were tallied after eighteen holes, he was down one stroke to Capt Van Ryssel the new winner and holder of the Fletcher Trophy for 1961. Col Kearney as well as Major Jim Wright also made a very strong bid for the title but ended up a stroke or two off the pace. Winners of other awards for the "hidden hole" etc were Lt Col Bagnall, Maj Jack Craig, Sgt Bill Richardson and Sgt Jack Sadler. Two of the feature winners on the front nine, Lt Col Bagnall and Maj Craig are shown waiting at the first tee with other members of the School's "fearsome foursome" Lt Col Jay Turner and Major Bill Thompson. As predicted after last year's tournament, Lt Col Turner is rapidly developing into the School's "long ball" hitter but this is probably only because we have finally convinced him to start using balls with covers on them.

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NO 1 DENT EQPT DEP NEWS

Farewell Party for Departing Personnel

A combined No 3 Dental Clinic and No 1 Dent Eqpt Dep party was held in the lounge of the new Recreation Building, Camp Petawawa on 25th May to honour Capt Mark LaChapelle, Lt Herb Doyle, WO 2 Maxie Fisk, Ssgt Merv Conkey and Sgt Ray Hopkins who are posted from this area. In spite of the fact that Capt LaChapelle was unable to attend because of car trouble, the party was a huge success.

Sports

On the evening of 21st June a challenge softball game was played between members of this unit and No 3 Clinic. Although the final score was 21 to 14 in favour of the clinic everyone enjoyed the outing and a return match has been slated.

Inspection

Colonel HM Cathcart, Commander of Camp Petawawa carried out his annual inspection of the unit on 31st May. All personnel were on parade and the Commander expressed satisfaction with the state of the unit.

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11 DENT COY NEWS

Canadian Dental Association Convention

Col IAL Millar, Maj RA Fell, Maj HR Kettyls, Maj MP Quinn and Maj LA Richardson attended the CDA Convention at Saskatoon 4 - 7 Jun 61. All were loud in their praises of the tone and organization of the proceedings.

Trooping of the Colour

RCDC personnel in the Victoria and Edmonton areas were impressed with the ceremonies attendant upon the Trooping of the Colours of the 1st and 2nd Bn PPCLI on 13th May and 10th June respectively.

Farewell Parties

Col Millar's off duty hours during the final few weeks in this unit were well taken up with farewell entertainment provided by a host of military and civilian friends. Similarly, farewell "dos" have been held for all other personnel proceeding on postings.

Duty Trips

Capt M Petryk, Sgt WJ Arnsby and Cpl J Dion provided treatment to service personnel and dependents at Ft Nelson, BC, 19 - 29 Jun 61.

Cpl JG Moore on temporary duty QM Stores in Calgary typing the Board for the Change of Command from Col IAL Millar to Col BP Kearney.

Lt Col GE Shragge (Ret) on temporary duty from Workpoint Bks, Esquimalt to RCAF Penhold and RCSME Vedder Crossing during the period Jun - Jul 61.

Capt JO Bowman, Sgt GH Storms and Cpl RJ Lowery proceeded to RCAF Holberg 12 Jun 61 for a period sufficient to complete dental requirements.

Ssgt H Hodkinson and Sgt VR Kidd relieved the dental assistant situation at RCAF Penhold during their TD trips from 24 Apr - 7 May and 8 May - 22 May 61 respectively.

Col IAL Millar has made his final inspection visits to the various clinics throughout the unit during the past few months.

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12 DENT COY NEWS

Sports

Capt Hal Bunston continued his good work for the Shearwater Flyers' Volleyball Team - helping them win the Eastern Canada Tri-Service Championship and a fourth place finish in the Eastern Canada Open Championship in Toronto in April.

Maj Gordon Throws Steak Party

Major "Ike" Gordon gave a STEAK party at the RA Park Officers' Mess for all officers in the Halifax Area to celebrate his promotion to Major. An impromptu gathering was held for all ranks before dinner.

Farewell Party for Sgt Marchand

A farewell party was held at the Grn Sgts' Mess in honour of Sgt Francis Marchand who will soon be proceeding on posting to No 35 Fd Dent Unit for employment at Marville, France.

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13 DENT COY NEWS

Duty Trips

Col AC Leman recently inspected dental clinics and visited the various headquarters in Eastern Ontario Area, Central Ontario Area and Western Ontario Area.

With the departure of seven dental officers and one dental technician laboratory from this unit, Capt Hunter, our Quartermaster, has had a fairly busy time scooting about the province checking out their dental kits.

Capt Gage at RMC Graduation Ceremonies

Capt NSA Gage, who retired from the RCDC in June, is seen here suitably attired in the gown indicative of graduation from the University of Toronto, at the 1961 RMC graduation ceremonies. Capt Gage has been the dental officer on the staff of RMC for the past several years.

Attend ODA Convention

Col AC Leman, Lt Col RHG Cunningham and Majors Chatwin, Pierce and Falkner officially attended the Ontario Dental Association Convention in May and took part in the presentation of the RCDC Exhibit.

13 Coy Clinic Day at Kingston

A highly successful Dental Clinical Day was held in the auditorium of the Canadian Forces Hospital Kingston in April and was attended by selected dental officers of No 13 Dental Coy located in Eastern Ontario Area. The following interesting papers were presented:

Points to Remember in Endodontics	- Lt Col RHG Cunningham, DDS
Management of the Fractured Maxilla - Case Report	- Major AG Andrews, DDS
Biopsies and Specimens	- Dr HD Steele, MD
Pain Associated with Sinuses and Teeth	- Lt Col TC Fort, MD
Radiation Injury	- Major WH Levis, MD
The Dentist and the Cardiac Patient	- S/L GL Fitzgibbon, MD
Expired Air Resuscitation with Particular Reference to the Dentist - With a Film	- Surg Capt MH Little, MD
Lesions of Periodontal Disease	- Lt Col WW Anglin, DDS
Surgical Correction of the Prognathic Mandible	- Colonel AC Derby, MD Major JVP Chatwin, DDS
Treatment of Trauma in Mass Casualties	- Colonel AC Derby, MD

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14 DENT COY NEWS

Col Purdy Visits Fort Churchill, Ottawa and Saskatoon

Col CE Purdy made a liaison visit to HQ Fort Churchill on 24 and 25 Apr 61 and inspected the dental facilities at that Station. He also attended the Stores Committee Meeting at the Directorate from 26 to 29 Apr 61. During 4 to 7 Jun 61 he represented the DGDS at the Canadian Dental Association and Western Canada Dental Society Convention in Saskatoon, Sask and on this occasion addressed the Canadian and Western Canada Nurses' and Assistants' Association on "Scientific Facts of Interest to Dental Nurses".

Farewells Given Col Purdy, Capt Cook and WO 1 Jones

On 19 May 61 a unit all ranks' mixed party was held in the LaVerendrye Officers' Mess by 57 Dental Unit(Militia). On invitation from Lt Col MJ Snidal, Commanding Officer of 57 Dent Unit, many couples from 14 Dent Coy attended. The evening was devoted to dancing and a delicious buffet supper was served.

During the course of the evening Col Purdy and Capt Dave Cook were honoured by the presentation of suitably inscribed silver mugs to mark the occasion of their departure from Winnipeg. Their ladies were presented with a beautiful corsage of roses.

The staffs of Coy HQ and the Fort Osborne Barracks clinic gathered together on 25 May 61 to bid "good-bye and good-luck" to WO 1 Al Jones who departed via annual leave to take up his new position in DGDS. Col Purdy on behalf of the staffs, presented Al with a travelling clock as a memento of the unit.

14 Coy Sports

The 14 Coy RCDC Bowling League concluded its activities in Apr 61 after a most successful season. Six teams, comprising players from RCDC personnel in Winnipeg and 57 Dental Unit (M) participated. Interest was keen and competitive as the play progressed. Capt Jacques Boulay's team took an early lead which was maintained throughout the season winning the Ash Temple Trophy only to be beaten in the finals by a team captained by Ben Gareau. This latter team was presented with the fine "Purdy Trophy" donated by Col CE Purdy and emblematic of league championship.

The season closed with a dinner-dance at the Fort Garry Hotel which was well attended. Trophies were presented during the course of the evening.

The league members expressed a hearty vote of thanks to the committee comprising WO 1 Ben Gareau, Cpl Frank Reid and Cpl Don Fenton.

A new committee was elected for the 1961-62 season, consisting of Sgt Keith Laurence, President; Cpl Frank Reid, Secretary and Capt Jacques Boulay, Treasurer.

Clinic Personnel - Fort Churchill

Left to Right:

Sgt Bill MacDougall, Sgt Art Bramble, Cpl Dick Walker
Capt Claude Arpin, Miss Bonneau, and Maj Jim Jolly

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15 DENTAL COY NEWS

Farewell Party to Honour Col Marsh

Over fifty members of 15 Dent Coy assembled at RCAF Station St Jean on the evening of 17th June to honour Colonel TL Marsh on the occasion of his retirement from the Corps. Lt Col AR Smith presented the retiring CO with a farewell gift on behalf of the personnel of the unit, to which Col Marsh replied in his usual eloquent manner. Three rousing cheers and the singing of "Auld Lang Syne" left the Colonel a little misty-eyed but recovery was hastened by the sight of a sumptuous buffet dinner supervised by the "gourmet" of the unit, Capt Jacob. We sincerely wish Col Marsh the very best in his new appointments as Professor in the Faculty of Dentistry at the University of Manitoba and as District Superviser of Dental Public Health in the Province of Manitoba.

Sports

Lt Col Butler and Capt Harrison represented 15 Dent Coy in the HQ Que Comd June Golf Tournament but their quest for prizes, fame and glory was unsuccessful. Major Guevremont, Capt Parent and Capt Jacob have also chosen golf as their summer sport, with Capt Jacob recording a local record of 41 holes in one day.

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4 FD DENT COY NEWS

Officers Attend Dental Conference

Capt GIJ Bisaillon, Major C Brown and Lt Col Evans attended the 5th Annual USAREUR and USAFE Dental Conference held in Garmisch, Germany 19 - 20 May 61.

Duty Trip

Capt LE Kelly and Sgt JH Kay, Capt GT Crossman and Sgt JAR Shields recently spent a week in the Putlos area of Northern Germany on Battalion exercises.

Officers and Men No 4 Fd Dent Coy
Summer, 1961

4 Fd HQ Relocated

HQ 4 Fd Dent Coy was officially relocated at FT HENRY from FT CHAMBLY on 15 Apr 61. The new HQ consists of an orderly room, stores section, repair section, dental clinic and CO's office. The central casting laboratory remains as before in FT CHAMBLY.

Changes in Werl Area

The clinic and the laboratory at 1 Fd Amb FT ANNE was officially closed 15 Apr 61 and the space returned to the RCAMC. The laboratory has been moved to the clinic at FT ST LOUIS. We have one clinic only operating in the Werl area.

Party for Departing Families

On the evening of 6 Jun 61 the dental sub-section at FT CHAMBLY were hosts to an all ranks and their wives party to say farewell to those RCDC people returning to Canada this summer; Capt and Mrs Bisaillon, Sgt and Mrs Toole, Sgt and Mrs Shields and Sgt and Mrs Palmer.

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35 FD DENT UNIT NEWS

Officers Attend Conference

Lt Col GR Covey, Majors EMC Franklin, WH Harrington, and CJ Sivell and Capt JG Boucher attended the USAREUR/USAFE Dental Conference in Garmisch Germany on 19 - 20 May. One of the highlights of the conference was a movie on external massage - a graphic picture of a recent article in the Quarterly. Other subjects included Management of Facial Trauma and Management of Severe Facial Injuries.

Front Row - L to R - Major C Brown; Lt Col GC Evans; Col Charles M Farber, Chief Dental Surgeon, USAREUR HQ, Heidelberg, Germany; Lt Col GR Covey; Col R Johnson, Chief Dental Surgeon, USAFE HQ, Weisbaden, Germany.

Back Row - L to R - Capt GIJ Bisaillon; Major CJ Sivell; Major WH Harrington; Capt JG Boucher; Major EMC Franklin.

Major Hinch Celebrates Crowns

Maj Hinch, after many weeks of waiting, was at last able to "don his crowns" and offer the customary refreshments to friends and colleagues. This was done 17 May 61, under the erroneous impression (due to signal transmission error) that this was the official date of his promotion. An exchange of signals between AHQ and the unit soon established the fact that the correct date of promotion was 16 May, as reported in the last issue of the Quarterly. Regardless of date, however, the bar was crowded with celebrants at noon on 17 May 61 and a most enjoyable evening was spent in the Social Centre, by the "Dentals" and their wives.

Sgt Roberts and Cpl Parker Holiday on Riviera

Sgt JM Roberts and Cpl WJ Parker reported a happy holiday on the French Riviera in late May and early June, with their families. No real difficulties were encountered (at least none were admitted), in their first venture "under canvas". Both are sporting a deep tan which should last for some time to come.

LAW Fisher to England on Leave

LAW D Fisher spent an enjoyable leave in England during May and June, with evidence, in the form of an excellent tan, of an unusually sunny period during her holiday.

Passport Problems - Ssgt Lawson

Ssgt L Lawson and family visited Spain during April, although the Spanish authorities would not allow him to enter the country without a passport. This made it necessary to proceed to the Canadian Embassy in Paris for a temporary passport, followed by a quick run to Spain before his leave expired.

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