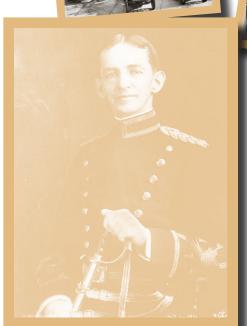


# The War Years

1917–1918



1916, Colonel Charles F. Mason, Post Commander; October 6, 1916 – November 27, 1917



"Modern wars are so short and decisive that it would be criminal to delay preparation until the moment of rupture."

## The Line of Succession

Colonel Charles M. Mason succeeded Major Ashburn as commander at Walter Reed on October 6, 1916. Although his first and most continuing professional interest was in surgery, he was, as noted, author of a handbook which *The Military Surgeon* called the medical soldier's "Bible."

He was quiet,<sup>3</sup> refined, scholarly, cultured<sup>4</sup> and had charming manners.<sup>5</sup> Like Colonel Richard he was small of stature,

with little inclination for any athletic exercise except walking. He was somewhat solitary in his habits and derived more enjoyment from playing classical records on his gramophone than from hilarious parties. The Mason family had moved to Panama in 1909, where they remained for seven interesting and exciting years. Although Colonel Mason was in charge of the Ancon Hospital, where the records of that period show he had a flair for economic management, he did not confine his activities entirely to administration. Gorgas' mosquito prevention work had caught the imagination of the entire world by this time, and as the Army medical laboratory was across the street from the Mason's quarters, the children were encouraged to breed mosquitoes from larvae in order to facilitate their father's research. It was, therefore, with real regret that the family returned to North America and a more routinized military life, in spite of the advantages of advanced schools for the children.

The geographical change from the tropical climate of Panama to the unpredictable one of Washington was at first accepted reluctantly, for city life had little appeal. Family visits to the adjoining Shepherd estate were delightful events, and like the Birmingham children, the young Masons found life on the military reservation of the U.S. Army General Hospital a pleasant adventure. The slope above Cameron's Creek provided an excellent sled-run in winter, and in the spring the surrounding violet-filled woods afforded the same sort of hide-away from household chores that had protected the young Birminghams from the all-seeing eyes of chore-minded parents. Domestic chores may have been avoidable, but Colonel Mason's scholarly instincts encouraged no procrastination with school work. The Takoma School kept the younger members of the family occupied, and Charles Mason assured his older daughter a proper skill on the typewriter,<sup>7</sup> for he set her to copying the manuscript for the fourth edition of the handbook, published by W. Wood and Company of New York in 1917.

General Gorgas was more interested in international public health work than in administration, and in January 1917, he informed the Secretary of War that he wished to retire. Colonel Birmingham had organized the *Division of Sanitation* in the Surgeon General's Office. He was not only efficient but also a senior officer,



Colonel Charles F. Mason; Commandant from October 6, 1916 – November 27, 1917

and General Gorgas proposed him for the Surgeon Generalcy. However, the critical military situation in Europe, with the probability of American intervention, caused him to remain in office. After Birmingham's detail as Assistant Surgeon General terminated, Lieutenant Colonel Robert E. Noble, one of General Gorgas' former assistants in Panama, gradually became more influential in Medical Department policies. When Noble was promoted to a temporary Brigadier Generalcy in the National Army and "jumped" not only his contemporaries but many of his seniors in rank, the situation had an adverse effect on Medical Corps morale. 10

Insofar as Walter Reed Hospital was concerned, the "Panama Influence" seemingly governed the appointment of the next two commanding officers. Colonel Williard F. Truby, also a former assistant of General Gorgas, "I was appointed as Mason's replacement on November 28, 1917. Of German extraction, 12 the Colonel was a quiet, phlegmatic bachelor.

Shy, but with a great deal of personality,<sup>13</sup> his humorously cynical thoughts sometimes found outlet in verse,<sup>14</sup> apparently his preferred means of self-expression as he was notably a poor correspondent.<sup>15</sup> He had entered the Medical Corps in 1898, more from patriotic duty than because of a preference for military life.<sup>16</sup> More interested in the clinical than in the administrative functions of his Corps,



Medical Library and officers' waiting room; presently used as office for Executive Officer WRAH; architect's drawing of Borden's Dream over mantel now hangs in Library Hall. 1924



he well deserved his reputation for being an excellent internist.<sup>17</sup> Therefore when the opportunity for retirement with physical disability came on November 28, 1918, Colonel Truby accepted it with alacrity,<sup>18</sup> returning to his native New York State to practice medicine successfully for more than thirty years.

In contrast to the usual civilian opinion of Army officers as raging bloodthirsty autocrats, Walter Reed Hospital either had a surprising number of small quiet men as managers or, with the adjudication of philosophers, those contemporaries who recalled the early commanders frame their recollections entirely with kindness. For of the conscientious, serious, somewhat humorless<sup>19</sup> Colonel Edward R. Schreiner, commanding officer from August 27, 1918 until March 15, 1919, very little is known.<sup>20</sup>

## Expanding the Bed Capacity

Construction of temporary war-model frame buildings began in June 1917, with preparations made for expanding the facilities to accept some 2,500 to 3,000 patients. A one-story frame building for housing fifty additional nurses and a two-story frame barracks for 250 enlisted men were erected on the Georgia Avenue side of the reservation. A mess hall capable of seating 250 men; a storehouse for medical supplies; a one-story frame guardhouse for fifteen prisoners and four guards, built near to Ward "B" and almost in front of the hospital; a Receiving Ward for storage of personal effects and accommodation of eight patients prior to assignment to wards; a "linen" building and ten single one-story forty-five-bed wards; three double one-story eighty-five-bed wards and one thirty-two-bed officers' ward were all built during the remainder of the year. Further, to increase the bed capacity an overflow of thirty patients could be accommodated on each of the ward porches. Amazingly, in 1917, as the pressure of war activities mounted and accumulated fatigue should have placed greater strain on all military personnel, the average number of patient days spent in the hospital decreased by twenty-eight per cent.<sup>21</sup>

The expansion of the physical plant created requirements for a larger staff and ultimately some fifty-three medical officers and eight dentists were on duty at Walter Reed. A modern fully equipped X-ray laboratory was installed on the third floor of the Main Building, where 1,498 patients were examined during the year, with 160 of the examinations requested by the dental service. In September, a Quartermaster detachment of one officer and one hundred men undertook the receipt and shipment of all medical and Quartermaster property not handled by the separate Property Division, responsible for the medical supplies necessary for the proper operation of the hospital and for procuring from outside sources and as required immediately, "such articles as are urgently needed to prevent suffering and save life." The Quartermaster had charge of all animal-drawn vehicles, but the ambulance service was under the direction of the Property Division, and from four ambulances (and two chauffeurs) on January 1, 1917, this service increased to ten ambulances a year later.



1917, Colonel Mason and family at Old Shepherd Mansion

In fact all of the former hospital services were outgrown before the end of the year. The laboratory, two rooms in the Main Building, was too small and had insufficient apparatus; kitchen floor space and equipment were needed to provide food service for the anticipated 2,500 persons; a new incinerator was a necessity, and a complete disinfecting plant. Dentistry, with the case load steadily increasing, required an entire wing in one of the new buildings; the surgeons wanted a separate building, leaving Old Main for administration, or at least separate operating pavilions for clean and infected cases; a cystoscopy room; etherizing room; cast room and, in anticipation of war casualties, special



Colonel Williard F. Truby; Nov. 1917 – Aug. 1918



orthopedic rooms. Similarly, the Eye, Ear, Nose and Throat work increased so rapidly that an entire new clinic building was discussed, complete with recovery room and a preparatory room for sterile dressings and water. Buildings were needed for physical therapy and hobby work, such as a therapeutic workshop, so necessary in the physical rehabilitation of the maimed soldiers.

Inpatient admissions were classified as to status in the Regular Army and the National Army, and including civilians, 4,256 patients were admitted during the year, of whom only 174 were classed as insane. Interestingly, in comparing the statistics for hospital admissions for the two groups, a noticeably higher proportion of both officers and enlisted men of the Regular Army were admitted for treatment of venereal disease and mental disturbances than of the National Army. The Post census for April 1917, the month war was declared, showed that fifteen officers, 145 Medical Department enlisted men and thirteen men of the Quartermaster Detachment were on duty. There was one Commanding Officer; one Chief of the Service who also served as a summary court officer; one Chief of EENT who also served as recruiting officer and as Assistant Professor of Ophthalmology at the Army Medical School; one officer who served as Quartermaster, Ordnance Officer and Commanding Officer of both the Quartermaster and Medical Detachments; one officer who served as adjutant, registrar and mess officer; one officer who served as pathologist and roentgenologist, and one dental officer.

The remaining officers were departmental assistants and served as board members, post exchange officer, athletic officer, librarian etc. The permanent buildings then included, as listed previously, the Main Building; mortuary; coal shed; isolation hospital; Quartermaster office; stables; garage; wagon shed; barracks; nurses' residence; quarters one and two for officers and the "Old Frame House" occupied by the Charley Andersons. Temporary buildings No. 200-208, as cited, were built during the year. Commodity prices had not increased appreciably at this time, for the average aggregate cost of general administration, exclusive of subsistence per inpatient, was less than in 1915. Strangely, the Surgeon General's Annual Report for 1917 noted the Walter Reed statistics for 1916. Whereas the hospital reported a bed capacity of 950 during this year of expansion, <sup>23</sup> the Surgeon General listed only 297, <sup>24</sup> one hundred of which would be temporary in the barracks.

A permanent power house structure was begun in May 1917 and completed the following year. Other permanent buildings included an incinerator, a brick morgue, and a garage addition with a connection to the old stables, 25 still in general use as the hospital reports carried expenditures for forage and the shoeing of horses. By the end of 1918, the reservation presented a hybrid appearance, for several other similar structures had been added to the 1917 group of temporary buildings. The few dignified red brick colonial buildings seemed out of place in the mass of barracks-like structures so familiar in cantonments throughout the United States. 26



No doubt Dr. Borden, who returned to active duty on June 6, 1917 as chief of the surgical service, found his creation, *Borden's Dream*, an architectural nightmare. Sprawled about the hillocks, connected by ramps and covered corridors, the low rambling wards clung to the wooded slopes of Cameron's Creek like the tentacles of an octopus. Even a bridge had been built across this feeble trickle in order to protect the long dragging skirts of the nurses from ground soil. It is more than possible that had the war continued longer the expansion would have developed as Dr. Borden predicted ten years earlier, for to "the west of Sixteenth Street (was) Rock Creek Park with its high ridges where temporary camps (could) be placed if such (were) required."<sup>27</sup>

As a consequence of the war, the surgical service had its most significant growth during the eighteen months that Dr. Borden served as chief. By January 7, 1919, however, "the greatest war in history" was past tense for all but students of military strategy and historians. Regular Army personnel was again available for domestic assignment, and Dr. Borden returned to his duty as Dean of the George Washington Medical School. He had, at last, served in the institution he created, but not as its chief executive. In the following years he had little association with the Medical Corps, and soon he was all but forgotten. That is, by all but Kean, who with his unfailing care, steadfastly gave credit where credit was due:

Dec. 20, 1927

My dear Colonel Borden

I had occasion to go to Walter Reed Hospital... and was much interested to see the group of fine buildings there that are approaching completion — The original main building with the two new great wings make a noble façade —

I thought how Borden's baby had grown and how proud it should make him to see what a great and beautiful as well as useful creation has grown up from the foundation which he laid —

The thought also came to me, and saddened me to think how few of the younger men who work there know about how entirely its inception and the acquisition of the original site and building were due to your initiative....<sup>28</sup>

Dr. Borden died in 1934, after a long illness. An editorial in the October issue of the *Military Surgeon*, apparently prepared by Kean, stated that "Walter Reed Hospital, the greatest of American military hospitals, originated in his foresight and was built as a result of his personal efforts and unwearied persistence."

In time the Medical Department fostered a custom of commemorating the services of distinguished medical officers with bronze plaques, mounted in the halls of the new Army Medical School. The money was supplied by "outside" sources; the applications for recognition were made by descendants of the deceased; a board appointed by the Surgeon General approved the proposals.

In the early forties some unused monies permitted erection of several plaques for which no applications had been made. Because of its size, or perhaps because



1917 – Prior to erection of East Wing, Main Building; Left: Double set of Qtrs, later replaced by Isolation Wards; Center: "The Pest House", later ward for Interne's Quarters; Extreme Right: Quartermaster Building.

few people know what it actually was, the original painting of *Borden's Dream* had been in the Army Medical School building but unhung for some years previously. Now, however, it served a useful purpose, for the "artists drawing of a proposed medical center which was made during his administration" was the convincing credential that secured a plaque for William Cline Borden. His family was apparently unaware of this belated and somewhat insignificant honor, <sup>29</sup> until after the Borden General Hospital, a temporary war service structure, was named for him in late 1942.<sup>30</sup>

## Organization

The mushroom growth of the hospital plant was matched by the complicated organizational structure of the hospital services. Gone were the days when the institution was an "uncrowded, unhurried sanitarium for the care of (a) small quota."<sup>31</sup>

The usual carefully prescribed Medical Department regulations governed the tight organizational structure, divided for convenience into six principal operating divisions.



# Hospital Organization. THE COMMANDING OFFICER.

Department of Administration.

#### 1. The Executive Officer.

- (a). Officer of the Day.
- (b). Night Administrative Officer.

#### 2. Correspondence and Records

- (a). Adjutant.
- (b). Personnel Adjutant.
  - (1). Insurance Officer.
- (c). Supervisor of Clinical Records.
  - (1). Registrar.
  - (2). Curator, Department of Illustration.
  - (3). Medical Examining Board for Officers.
  - (4). Disability Board for Enlisted Men.
  - (5). Demobilization Board.

#### 3. Inspection.

- (a). Hospital Inspector (inspection of administration and service departments).
- (b). Sanitary Inspector (inspection of grounds and buildings for sanitation and maintenance).
- (c). Post Surgeon (inspection of dairies, food supplies, etc.)
- (d). Adjutant (inspection of public funds).
- (e). Survey Officer (inspection of unserviceable property).

## 4. Detachment Administration.

- (a). Detachment Commander, Patients.
  - (1). Receiving Officer.
  - (2). Disposition Officer.
- (b). Detachment Commander, Medical Detachment.
- (c). Detachment Commander, Quartermaster Detachment.
- (d). Detachment Commander of Nurses.
- (e). Detachment Commander of Aides.

## 5. Police and Fire Protection.

- (a). Intelligence Officer.
- (b). Prison Officer.
- (c). Fire Marshals.
- (d). Police Officer.
- (e). Courts Martial.

# Department of Service and Supply.

- 1. Service of Supply.
  - (a). Supply Officer.
  - (b). Ordnance Officer.
  - (c). Finance Officer.
  - (d). Transportation Officer.
  - (e). Salvage Officer.
  - (f). Medical Supply Officer.
- 2. Constructing and Utilities Service.
  - (a). Constructing Quartermaster.
  - (b). Utilities Officer.
- 3. Mess Service.
  - (a). Mess Officer.
  - (b). Dietitians.
- 4. Motor Transport Service.
  - (a). Motor Transport Officer.
- 5. Telephone and Telegraph Service.
  - (a). Signal Officer.
- 6. Post Exchange.
  - (a). Exchange Officer.
- 7. Recruiting Service.
  - (a). Recruiting Officer.
- 8. Morale, Education and Recreation Service.
  - (a). Chaplains.
  - (b). Morale Officer.
  - (c). Education and Recreation Officer.
  - (d). Service Club Hostess.
  - (e). Librarian.

# Department of Professional Services.

1. Surgical Service.

Chief of Service.

- (a). Administrative Officers.
  - (1). Assistant to Chief of Service.



- (2). Chiefs of Sections.
- (3). Ward Surgeons.
- (4). Surgical Emergency Officers.
- (b). Professional Sections.
  - (1). General Surgery.
  - (2). Septic Surgery.
  - (3). Empyema.
  - (4). Maxillo-Facial.
  - (5). Neuro-Surgical.
  - (6). Eye, Ear, Nose and Throat. (In July 1918, subdivided into Eye Section and ENT Section.)
  - (7). Orthopaedic. (Separate from General Surgery in July 1918; Central Dressing Station opened for all ambulatory orthopedic cases, Dec. 17, 1918.)
  - (8). Amputation.
  - (9). Dermatology and Syphilis.
  - (10). Urology.
  - (11). Obstetric and Gynecologic.
- (c). Professional Departments.
  - (1). Dental.
  - (2). X-ray.
  - (3). Orthopaedic Appliance Shop.
  - (4). Anesthesia.
- 2. Medical Service.

Chief of Service.

- (a). Assistant to the Chief of Service.
- (b). Chiefs of Section.
  - (1). General Medicine Section.
  - (2). Neuro-Psychiatric Section. (Early in 1918, hospital became one of six centers for care of nervous and mental cases. Five 150-bed wards were assigned.)
  - (3). Contagious Disease Section.
- (c). Receiving Officer.
- (d). Post Surgeon.
- (e). Ward Surgeons.
- (f). Medical Emergency Officer.

## Laboratory Department.

- (a). Bacteriological Section.
- (b). Chemical Section.
- (c). Pathological Section (Mortuary).

## Reconstruction and Education Departments.

#### 1. Ward Handicrafts.

For patients unable to leave their wards.

## 2. Curative Shop Work.

For patients whose primary requirement is curative; occupational therapy.

- (a). Wood working.
- (b). Rug weaving.
- (c). Clay modeling.
- (d). Gardening.
- (e). Typewriting.

## 3. Educational and Vocational Training.

- (a). Academic: English, reading, writing, arithmetic, etc.
- (b). Commercial: Shorthand, typewriting, bookkeeping, accounting, office appliances.
- (c). Trade and vocational training:
  - (1). Auto mechanics.
  - (2). Garden and greenhouse management.
  - (3). Electrical wiring and dynamo tending.
  - (4). Drafting.
  - (5). Jewelry making and repairing.
  - (6). Machine shop practice.
  - (7). Motion picture operating.
  - (8). Photography.
  - (9). Rug weaving and repairing.
  - (10). Wireless telegraphy.
  - (11). Oxy-acetylene welding.
  - (12). Vulcanizing and tire repairing.
  - (13). General printing.
  - (14). Linotype operating.
  - (15). Wood shop practice.

## Physio-Therapy Department.

- 1. Measurement and Record Section.
- 2. Hydro-therapy.
- 3. Electro-therapy.
- 4. Massage.
- 5. Medical Gymnastics.



## Nursing Department.

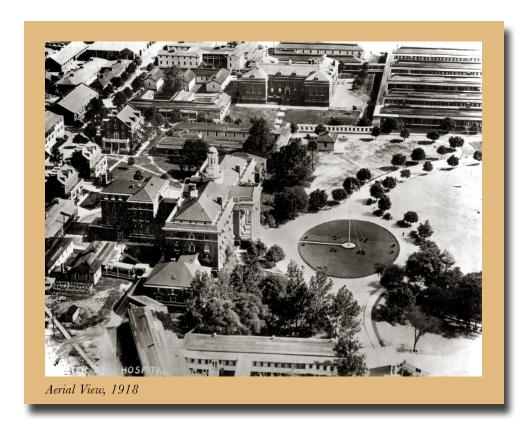
- 1. Army Nurse Corps Principal Chief Nurse.
  - (a). Assistant Chief Nurse (Records and Correspondence).
  - (b). Day Supervisor for Graduate Nurses.
  - (c). Night Supervisor for Graduate Nurses.
- 2. Army School of Nursing.
  - (a). Superintendent.
    - (1). Theoretical Instructor.
    - (2). Practical Instructor.
    - (3). Circulating Supervisors for Student Nurses. 32

Whereas a mean average of 22.8 medical officers, 223.197 Medical Department and Quartermaster personnel and 44.7 Army Nurses were on duty in 1917, a year later the mean average strength had increased to 86.3 officers, 689.1 Medical Department enlisted men, 136.7 Quartermaster enlisted men, 147.8 Army nurses, 33.6 Reconstruction Aides and 18.9 civilian employees;<sup>33</sup> there were, during 1918, some 13,752 patients treated.

## **New Functions**

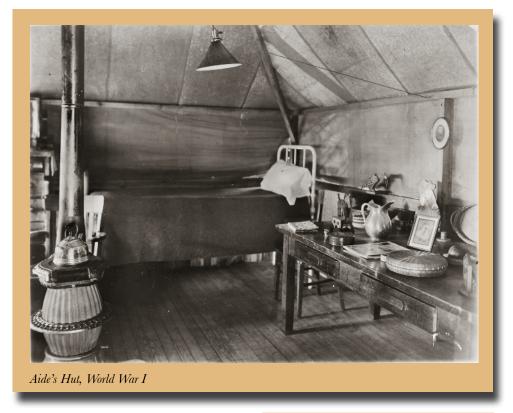
Occupational therapy and rehabilitation was a new function in therapeutic care of patients and required considerable space and equipment. In February 1918, "a single room was secured in what was originally the Lay Homestead, dating from Civil War Days, and tenanted by the Post carpenter and his family."<sup>34</sup> In spite of limitation to simple carpentry with Charley Anderson's discarded tools, the work was from the first successful as a morale builder.

The first aides, arriving on February 15, began their work on an orthopedic ward, teaching men to weave colored wool squares for blankets. From this small beginning the activities broadened to include both remedial and palliative courses. By April 1918, when the Division of Physical Reconstruction of the Surgeon General's Office authorized funds for shop equipment and the payment of expert educational directors, the value of this new function was already evident. By the latter part of the summer the Department of Occupational Therapy was not only stimulating patient interest through weekly staff meetings, but it was serving as a training and demonstration school for other hospitals. Like many other "firsts" in military medicine, Walter Reed was the first American military hospital to have a professional psychologist on its staff.<sup>35</sup>



This department was divided into five sections: Administrative, Psychological and Statistical, General and Academic, Technical, and Recreational. By the end of the year the usual academic and technical courses were being offered. These included Agriculture, with outdoor truck farming, forced growth under glass; flowers and textbook studies; Printing, hand, linotype and press; Mechanical and Electrical work such as automobile repairing, oxyacetylene welding; wiring, telegraphy and radio operation; Machine Shop Practice, with electrical and mechanical studies; Drafting; Woodworking; Display Painting; Arts and Crafts; Leather Work; Rug Weaving, and Physical Education.<sup>36</sup> The program eventually became so popular that five occupational therapy buildings were required. The hydrotherapy, electrotherapy, gymnasium and physical therapy sections expanded in proportion to their respective needs.

In September 1918, the Lane Convalescent Home, with capacity for ten enlisted men, was opened in Takoma Park; in November, Mrs. Evelyn Walsh McLean released "Friendship House" as a convalescent home for fifty officers. A hospital newspaper, *The Come Back*, made its first appearance on December 4, 1918. All of the work was performed by volunteers, and the profits were presented to the Donation Fund in the Surgeon General's Office.<sup>37</sup>







1919; Left: Main Barracks showing Old Guard House; Right: Post Band and Grand Inspection

In accordance with its prescribed mission to the Medical Department, the American Red Cross was erecting convalescent houses at the base and general hospitals in the United States, including Walter Reed. As one of its special service projects, in February 1918, the American National Red Cross authorities asked Mrs. Edith Oliver Rea, a wealthy Pittsburgh philanthropist residing temporarily in Washington, to interest a group of volunteer ladies in welfare work at Walter Reed. Mrs. Rea became Field Director of the Red Cross project and Miss Margaret Lower the Assistant Field Director, as approximately 75 ladies signed up for ward service on certain days.

The hospital was divided into three sections, each with a volunteer supervisor and four helpers. Thus only fifteen carefully selected women did the first ward visiting. Their first activities included recreation, games, group singing, oral reading, letter writing and a shopping service for the benefit of the patients. When the Convalescent House was completed on May 11, the volunteer socialites arrived with brooms, mops, buckets and soap to clean the building for presentation to the commanding officer on June 11. This proved to be a greater undertaking than visualized, but the indomitable ladies placed a GI<sup>38</sup> trash can in the fireplace, heated their own water, and with the assistance of some ambulatory patients, set the place in order.

The first "uniforms" were light blue aprons, similar to the uniforms used by volunteer workers in the District of Columbia Chapter. In July 1918 the National Headquarters directed that all volunteer lay workers in the Convalescent Houses wear a drab shade of gray gingham. This proposal met with opposition from Mrs. Rea and her group, and as a result of their protests the soft pearl gray uniform-dress selected by Mrs. Rea was used. As the casualties began arriving from overseas in large numbers, and responded to the well meaning kindness of their benefactors, such terms as "My Gray Lady of the Red Cross" or "My Monday Gray Lady" etc., became familiar terms. The title, which the "Gray Ladies" accepted as a term of endearment, was thus bestowed by the doughboys themselves.<sup>39</sup>

In December, the American Library Association used part of the Red Cross building for a central recreation library of some 6,500 books. Ward service was provided for all bed patients, and the library collection of technical books was adequate to supplement the academic courses sponsored by the reconstruction program. <sup>40</sup>

Various welfare organizations contributed generously in both equipment and personnel. The YMCA "hut" first located in the basement of the Main Building, later had its own headquarters on Dogwood Street, across from the Post. The Knights of Columbus opened a "hut" in November 1918, and the Jewish Welfare Board maintained quarters in a nearby residence on Butternut Street. The principal Service Club, No. I, provided by the National Catholic War Council, was opened on December 15, 1919. Equipped with a cafeteria and dining room, lounge and a number of bedrooms for rent to transient visitors, it featured entertainments and socials all during the active emergency. In addition to the Red Cross, the various clubs sponsored recreational activities for patients such as celebrity shows, musicals, movies, dances, classes in dancing, lectures, sight-seeing trips, corn roasts, picnics, theater parties, athletic teams, dramatics, masquerades etc. The special personnel such as aides, recreation workers and nurses likewise had their own entertainments.<sup>41</sup>

Organized athletics played an important part in rehabilitation, and playing fields and tennis courts were built, and during the early postwar period Mrs. Rea provided funds for a swimming pool. Enclosed on each side by occupational therapy wards, this prized recreation spot was eventually used as an all-purpose swimming pool for the entire command.



The Post Exchange grew in proportion to other installation support activities and sponsored a barber shop, soda fountain, restaurant, laundry, tailor shop and cobbler.

The medical post was like a busy little city, and its transient population was united in a common attempt to rehabilitate and return to civilian life as useful citizens, the injured doughboys from France. The war was officially over, but the Quartermaster at Walter Reed had endless trouble with the records and equipment of soldier-patients transferred from the rapidly closing cantonments, from which they were made to take all the possessions on their descriptive list. In many cases the clothing was not invoiced at the last Quartermaster station, an omission which caused extensive correspondence and misunderstanding between the Quartermaster and the patients. At the Walter Reed U.S. Army General Hospital it was disconcerting, to say the least, to have patients reporting in at the hospital's receiving ward equipped with rifles and one hundred fifty rounds of ammunition.<sup>42</sup>

# Nursing

There were a number of Chief Nurses at Walter Reed during 1917-1918, and providing an accurate biographical list has defied even the Nursing Division of the Surgeon General's Office. Some of them apparently stayed for a month or two and then moved

on to open new stations or to go overseas with mobile units. The annual reports carry few references to personnel, and the sections prepared by the Nursing Service are mere recitals of skeleton facts — an average of so many nurses were on duty at a given time. The writer has had singularly satisfactory experiences with the nursing service at Walter Reed, and so the 147.8 mean average of nurses reported as on duty during 1918, leaves a bewildering sense of frustration as to who composed the .8 per cent, unless that figure can be assigned to the elusive Chief Nurses who came and went about their duties but left no record of their activities. Miss Bessie S. Bell, the principal Chief Nurse, was released from Walter Reed in October 1917, to become director of the Army Nursing Service of the American Expeditionary Forces. 43 Frail-looking, modest, retiring and unaggressive, 44 she was as pleasant, lady-like and gentle as her euphonious name suggests. 45 Though efficient with records, she was not an aggressive personality, and her reputation for being an accomplished pianist did little to mollify contemporaries who judged her lack of positive leadership by the feminist patterns of the day. Like her chief, Miss Dora E. Thompson, Superintendent of the Corps, she was quietly efficient but not spectacular. In fact, the Medical Officers apparently believed that their "quiet efficiency was such that both women so blended with the team that (they) have to be grabbed, as it were, and dragged into view."46

These were turbulent days in nursing circles, for the Army increased its demands for personnel with predictable certainty. More, more, more was the constant plea, as nurse leaders and teachers planned frantically to reconcile demand and supply. As a former Superintendent of the Army Nurse Corps, Miss Delano was not only Army-minded, but she had taken seriously the Red Cross mandate to provide reserve nurses for the Army in time of war, for civilian communities in time of disaster.

The three-year training period was an insurmountable obstacle in keeping a ready supply of nurses flowing to the Armed Forces, and so the Red Cross had long planned to use health aides as assistants in case of a national emergency. A carefully prescribed program limited their duties and placed them under the jurisdiction of graduate nurses. Academically, nurse training was not out of the "dark ages" of being a service rather than a profession, and many of the prominent leaders feared acceptance of aides would undermine their economic security.<sup>47</sup> War or no war, this was a social problem of grave significance to an emergent group.

Miss Thompson appreciated more fully than her civilian contemporaries the transitory nature of military expansions. Knowing that evacuated casualties must have immediate nursing care, she supported Miss Delano in the Red Cross proposal for immediate and temporary use of aides.

As director of the Hospital Division, Office of the Surgeon General, <sup>48</sup> created in July 1917, General Noble held an extremely influential position, and regardless of the fact that Gorgas was the Surgeon General, he essentially held the balance of power when the Amazonian dispute between the national nursing groups began in the spring of 1918. Several of the doctors from Johns Hopkins, including Dr. William Henry Welch, friend of the Surgeon General since the days of Major Walter Reed, exerted considerable influence on



national medical policies, including the Medical Department of the Army. Some of these men freely voiced their opinion of Regular Army administrative methods and personnel management, and they apparently persuaded Generals Gorgas and Noble to disregard the advice of experienced Regular Army personnel, including Miss Thompson, and accept the civilian interpretation of Army needs. Such was the situation in regard to the plans for using "trained" nurses rather than nurses' aides to provide immediate nursing care for men in the cantonment hospitals.

Nurse leaders from the Department of Nursing Education, Teachers College, Columbia University, adopted an intransigent stand for the training of additional nurses. They found fault with the nursing service as rendered by the corpsmen in Army hospitals and under the supervision of an all-graduate even if quickly expanded Nurse Corps. Inconsistently, therefore, they insisted on using the Army hospitals as training schools, with accredited supplementary work in the specialties given in civilian hospitals. The ensuing dispute between the two factions, the Army Nurse Corps and the Red Cross Nursing Service interested in providing immediate care, and the national nursing organizations determined to raise the academic standards of nursing education and train nurses at government expense, is basic to the history of nursing in these United States. Between politics and wiles, organized nursing won its greatest academic battle in the half-century.



Mrs. Emmy Sommers; Head Occupational Therapy Aide, 1918–1947

In spite of the consistent and determined efforts of the Red Cross Nursing Service to provide an adequate number of nurses for the Army, recruitment was difficult all during the war. This was a period of turmoil and confusion, and not all conflicts in ideology were restricted to international events; cleavages between civilian and military medical health groups may have been more apparent than inter-agency disagreements, but the Army and the Red Cross likewise had some misunderstanding over priority of function. In regard to nurse procurement, it was the usually discreet "Pinky" Fisher who became so incensed at the proprietary attitude of Red Cross officials that he asked the Superintendent of the Army Nurse Corps caustically if the dog wagged the tail or the tail wagged the dog.<sup>49</sup>

The Army School of Nursing, proposed in March and authorized in May 1918, was a turning point not only in the history of the Army Nurse Corps but of the Medical Department itself. Whereas in 1908 medical officers had used civilian influence to further departmental plans for improving the status and benefits of Army doctors, <sup>50</sup> parenthetically the shoe was on the other foot, and a program dear to the hearts of civilian advisers was foisted on the Army. Dr. Welch and Dr. Franklin Martin were powerful allies of the non-military nurse protagonists. To the dismay of the Red Cross Nursing Service, which was thereby unable to make firm plans for assisting the Army, General Gorgas vacillated on the question of using aides, giving at least three different decisions. The controversial question was finally settled by the Armistice rather than by an acceptable policy.<sup>51</sup>



Red Cross "Hut," 1920

On August 5, 1918 Walter Reed General Hospital opened one of the first units of the Army School of Nursing and by September had a class of some forty-five students. Before the close of the year the class totaled fifty-one.<sup>52</sup> The influenza epidemic which swept the nation in the autumn of 1918, crippled the training program severely, and Army students were released from class work to render nursing care on the wards.<sup>53</sup>

In retrospect it seems obvious that cessation of war should have brought

termination of the Army School of Nursing.<sup>54</sup> However, in March and April 1919, release was offered those students who entered the school primarily because of public pleas to render patriotic service; although begun as an emergency program, the school was continued as a civil or non-militarized activity of the Medical Department. The daily nursing duty consisted of eight hours on the wards, one hour of class and one of study, with an eight-week rotating service in the various professional services. Moreover, it required essentially two professional staffs, for the school, under the general direction of the Principal Chief Nurse, had its own director, teachers and floor supervisors, while patient care was provided by the hospital's regular nursing staff. As



the program closed in the approved cantonment hospitals, the students were concentrated at the Letterman General Hospital at the old Presidio of San Francisco and Walter Reed. Eventually, Walter Reed became the last outpost of the Army School of Nursing, the Mother House for the training of student nurses.

The professional activities carried on at Walter Reed during 1917-1918 were so greatly magnified by the expansion and departmentalization that the tranquil life of the pre-war days was unrecognizable. The expansion in the service of medicine, surgery, dentistry and nursing was no greater than that made by the laboratory service. Lieutenant Colonel<sup>55</sup> Henry J. Nichols became Chief of this service April 9, 1918, in time to participate in the general development of the new laboratory, storeroom, animal house and addition to the morgue. The need for the latter was made apparent during the influenza epidemic when it was necessary to erect a tent near the morgue in order to find room for the caskets and bodies. The hospital was now performing many of the Laboratory procedures formerly sent to the Army Medical School, which, likewise under expansion, was feeling the increased tempo of the times.

As in his pioneer work at the Army Medical School, Henry J. Nichols made a lasting impression on the laboratory service of Walter Reed Hospital. Here he began an intensive study of the *Streptococcus hemolytica*, culturing from the unusual number of empyema cases, from tonsils and from throats. He emphasized the importance



of post-mortem examinations in substantiating clinical findings, and he sponsored the detailed study of the influenza cases, both through laboratory techniques and X-ray. Of perhaps greater significance to the other professional services, he instituted the practice of joint staff meetings, rotating the responsibility and presentation of clinical material between the three major services of Laboratory, Medicine and Surgery, or one of their sub-sections.<sup>56</sup>

## Collateral Activities

Mobilization of "practically the entire National Guard, the increase in the Regular Army and Navy" and plans for mobilizing the National Army taxed the Army Medical School facilities to the fullest. An increase in the size of the physical plant was therefore necessary if enormous quantities of vaccine were to be prepared for ready shipment to the various medical supply depots and thence for direct issue to post and camp surgeons.<sup>57</sup> Arthur, a Brigadier General in the National Army after October 9, 1917,<sup>58</sup> estimated that in that year alone the \$240,000.00 net cost of vaccine manufactured at the School would have grossed \$1,200,000.00 in the civilian market. Further, the 6,701 Wasserman reactions performed at slightly less than one dollar each would have cost some \$33,505 if performed in a civilian laboratory.<sup>59</sup> The Army Medical School was therefore a profitable health investment for the Medical Department.





As a War Department General Order of May 14, 1908 prescribed an annual physical test for officers, as well as examination before promotion to higher grades, the School faculty had performed this service for officer candidates in and around Washington. With expansion of the various sections of the Reserve Corps, the physical examination became a burdensome part of the School's administrative activities. Ultimately, as the records of large contingents of Reserve Officers were processed for overseas assignment, the School became essentially a small induction station, and an appropriate section called *The Foreign Service Bureau* was established.

A new responsibility was added to the academic activities during 1917, for medical officers assigned to lecture tours required moving pictures, lantern slides, charts, graphs and other addenda for illustration. <sup>60</sup> These were supernumerary activities and affected, primarily, the services of the younger or junior faculty members.

Many of the older and more experienced Army doctors, heads of departments and separate laboratories, were frequently engaged in teaching and writing, usually on professional subjects. In spite of being Commandant of the School, General Arthur was at heart a field officer rather than a clinician, laboratory technician or research worker. For this current literary endeavor, he chose, therefore, a subject in harmony with his own interests, and the *Military Surgeon* for January 1917, published his article on "The Advantages of Military Training for Young Men," which a later editor noted was "written with his characteristic wit and genius." He spent a great part of his time during this period reviewing many Medical Department items prior to standardization, for as in the case of the Walter Reed professional facilities, these organizations were logical proving grounds and natural testing laboratories for the

Surgeon General's Office proper. This was a natural function within the organizational structure, and General Arthur participated intimately in Medical Department activities at the national level. Thus it is not surprising that in the two-year period from July 3, 1915 to June 25, 1917, he served on fourteen important Army boards.

The usual eight-month course at the Army Medical School had been shortened to accommodate the increased number of students, and the faculty substituted three four-month sessions. On November 12, 1917, an elaborate course in orthopedic surgery was opened which included sections on mechanical prostheses, research, development and repair of orthopedic appliances. This represented a distinct departure from former policies as the Medical Department usually procured, under the law of June 17, 1870, prostheses from civilian sources. The required expansion in the physical plant was finally met in 1918, by leasing and adjoining a neighboring building.

Some idea of Medical Department prestige of the World War I period is reflected in the assignment, from the Rockefeller Institute for Medical Research, of one hundred fifty Medical Reserve Corps and Sanitary Corps Officers for a one-month course of laboratory instruction. Further, some thirty-six enlisted men were trained in the orthopedic workshops, and four hundred thirteen enlisted men were instructed in laboratory and X-ray procedures. In the latter case the didactic instruction was supplemented by practical on-the-job experience in nearby hospitals, military and civilian, including Walter Reed.

General Arthur estimated that the accrued savings for 1918, in School-sponsored tests and vaccines, equaled \$92,189.00 on Wasserman reactions and \$3,600,000.00 on the 18,000,000 doses of vaccine. Moreover, the laboratory staff was actively experimenting with oil suspension rather than saline suspension of vaccines, while other qualified personnel advised the Surgeon General's Office regarding a suitable design for and manufacture of an X-ray ambulance for the portable X-ray unit, and other pieces of new equipment. Further, in addition to the numerous curricula activities, the Army Medical School staff did extensive photographic and printing work for the Surgeon General's Office, and X-ray work for the Government Hospital for the Insane.

The policy of accepting a small "advanced" class of Regular Army officers for an intensive course was abandoned as the Regular Army personnel was needed to staff new installations and overseas units. Neither the experience of the war period nor General Arthur's thirty-seven years of service with the Medical Department had convinced him that bestowal of the degree of Doctor of Medicine necessarily equipped its possessor to meet the varied requirements of a medical officer in the United States Army. Thus in contemplating the phenomenal growth of the Army Medical School and possibly the prospect of a return to peacetime standards, he viewed its academic mission in terms of "a post graduate institution, with all the... equipment, and facilities for teaching everything necessary including field work to make Army Medical Officers out of selected graduates of medical schools." Clearly, the Commandant viewed the School's



future in terms of its magnificent past: a return to the eight-month course, increased physical accommodations, and a good drill and camping ground for the furtherance of field training. For if the experience of the World War I mobilization period had taught medical planners any lesson, it was in relation to adequate field medical training for the Corps and proper means of evacuating the wounded.

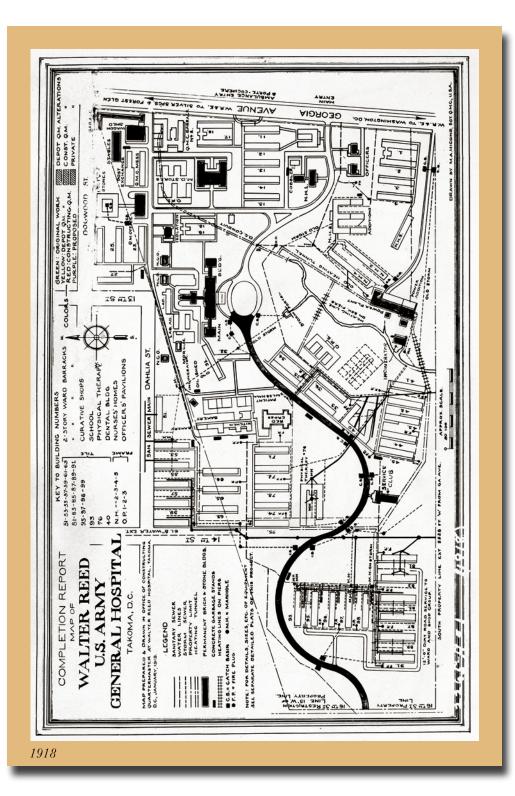
General Arthur had, until the autumn of 1918, a successful and distinguished career in the Medical Department. As the senior of sixty-three Regular Army Colonels<sup>66</sup> and temporarily a Brigadier General in the National Army, he not only considered himself an eligible successor to General Gorgas, but, with the latter's permission and endorsement, stated his credentials for the Secretary of War. In spite of his tendency to be a bit critical, even hasty in his judgment of people, in many respects he represented the ideal medical officer by the standards of the day: a positive but charming personality; courtly manners; wit; technical proficiency in his preferred field of medicine — anatomy and surgery; a cultural background which included the ability to read and speak French fluently and translate Portuguese and Italian. Moreover, he had an articulate philosophy on the Medical Department's first responsibility — support of the fighting forces of the Army. Some of his associates believed him irascible and that his facility with pen and pencil was merely an outlet for an erratic personality.<sup>67</sup> In any case, this latter accomplishment was his undoing.

There was considerable competition between Regular Army and Reserve officers during World War I, with the latter group compelled to wear identifying insignia. Many of the doctors believed they were unsatisfactorily placed, their services were unappreciated and that the prize assignments invariably went to members of the Regular Army Medical Corps. Once in uniform, military mores, rank and precedence, assumed dimensional importance. If as civilians they had dismissed the Army doctors as of negligible importance to medicine itself, their perspective changed rapidly as seniority became an operative factor in their own lives. Age and experience, training and assignment, were command sequelae to the regulars; to the reserve they represented a new-found prestige as well as compensation. Many reserve officers, particularly the specialist groups, alleged that the Regular Army not only failed to use their particular qualifications, but they were bitter that prescribed War Department regulations stymied reserve promotions. Unavoidably, a schism developed between the two groups.

As noted before, General Noble, through his association with General Gorgas in the Canal project, held an enviable position near the "throne." He was apparently popular and well-liked by the several distinguished and politically influential Reserve and National Guard officers stationed in the Surgeon General's Office, including Dr. Welch, who likewise held a commission and energetically inspected military camps, <sup>68</sup> and the civilian nurses. <sup>69</sup> As thirty-sixth on the list of permanent Lieutenant Colonels, he was many years the junior of some of the men then under his jurisdiction. Arthur had no assurance of being selected as Surgeon General, but it was rumored in the late summer and early fall of 1918 that General Noble might succeed to this position when General Gorgas retired for age on October 3.

Many of the most experienced and certainly the most influential men in the Corps were in responsible overseas positions at this time. Some of them undoubtedly believed, as did many officers during World War II, that the men who stayed safely at home in office positions received more rapid promotions and better rewards than those who served in the field. To them the prospect of having the civilian group of consultants and/or National Army officers control the appointment of the Surgeon General was demoralizing.

Almost as a brotherhood the Ireland faction united. Colonel Kean was elected spokesman. An appeal was presented to General Pershing to have Ireland, his Chief Surgeon during the punitive expedition in Texas, and Chief Surgeon in France, appointed Surgeon General. Pershing cabled the Secretary of War, who referred the matter to the President. Pershing cabled the Secretary of War, who referred the matter to the President and, more intimately, Secretary of War Baker, saying that Ireland seemed to be just the man. Of more importance, perhaps, was the influence of the distinguished reserve officer, Colonel J.M.T. Finney, likewise of Baltimore, personal physician of the President and present at the European meeting where, "the Ireland gang" surrendered their individual claims to the Medical Department's highest office. (Ltr M.W. Jones, Col., M.C. ret., to writer, 10 June 1952). On October 4, 1918,



Merritte W. Ireland was appointed Surgeon General. He had come a long way since his assignment as Company Commander of the First Company of Instruction to be organized at Ft. Riley, Kansas.<sup>72</sup>

General Nobel was rotated to overseas assignment, on his own understanding that he was General Ireland's replacement in the AEF. He was therefore both surprised and disappointed on hearing that the key assignment had gone to Colonel Walter D. McCaw and that he was to be assigned as Surgeon of the Port of Bordeaux.<sup>73</sup> Brigadier General Charles Richard filled the position of acting Surgeon General during October and early November 1918, in the brief interim prior to General Ireland's arrival in the United States.

Temporary promotion, or in fact any irregularity of promotion which disregards age and experience in a group structure built on seniority, seems to affect morale adversely. Thus General Noble's rapid advance over such men as Arthur, Kean, McCaw, Glennan, Keefer, Fisher, Darnall and others of the "old-timers" group rankled. <sup>74</sup> Ireland had disposed of the psychological aspect of the "command" problem by having Noble assigned to a minor position, but Arthur, perhaps without ready knowledge of affairs in Europe, with haste rather than foresight, penned a scathing letter to General Noble, attributing his rapid rise in rank on his ability to infatuate "a weak and misguided old man." <sup>75</sup>

It is useless to conjecture on "what might have been" had General Noble not been embittered, but like the Chaucerian tales, his participation in the Arthur fiasco has been preserved through many repetitions. He forwarded the Arthur letter to the already retired General Gorgas, suggesting disciplinary action. Perhaps as a result of his recent experiences with other health and medical politics, Newton D. Baker, Secretary of War, made short work of the complaint. General Arthur was reduced to his Regular Army grade of Colonel, and being sixty-two years of age he was directed to retire by order of the President.<sup>76</sup>

All stories must have an end, even those from real life. General Arthur's summary retirement from the Medical Corps has a pathetic side. The Noble letter was written in confidence, and although about a man for thirty years his friend,<sup>77</sup> his rapier-like thrusts were doubtless no more caustic than usual. Well known for his wit, his caricatures and his inclination for letter-writing, he apparently expressed the viewpoint of other more timorous officers. There is little doubt that General Gorgas had many times enjoyed the barbs directed at others, and under other circumstances he might have been more indulgent.<sup>78</sup>

Following his retirement, General Arthur lived for many years in Washington, visiting the Walter Reed General Hospital regularly and using the Post Library facilities with great enthusiasm. Never, even in his old age, did he lose the dignity, distinction and charming manners<sup>79</sup> which set him apart as the hospital's most individualistic commander. On April 19, 1936, at the age of eighty years and eighteen days, the corpulent old campaigner, veteran of the Indian Wars, commander of a hospital ship in the Spanish-American War, member of the China Relief Expedition in 1901, one-time Chief

Surgeon of the Philippine Division, Commandant of the Army Medical School, anatomist, artist and wit died at Walter Reed General Hospital, the institution he opened for the Medical Department in 1909. 80

## References

- 1. Elihu Root, Annual Rpt TSW, Nov. 27, 1901, quoted from Otto L. Nelson, pg 49.
- History of Association of Military Surgeons in U.S., 1891–1941; Washington, The Ass. of Mil. Surgeon, 1941, pg 17.
- 3. Interview with Maj. Gen. Morrison C. Stayer, M.C., Ret., June 10, 1950.
- 4. Interview with Brig. Gen. Jefferson R. Kean, M.C., Ret., April 17, 1950.
- 5. Telephone conversation with Lt. Col. Nellie Close, ANC, Ret., June 1950.
- William C. Gorgas, Sanitation in Panama, NY & London, D. Appleton & Company, 1915, pg 243.
- Interview with Mrs. Montgomery Blair (Virginia Mason) and Mrs. William Blair (Mary-Eula Mason) May 29, 1951.
- 8. James M. Phalen (comp) *Chfs. of the Med. Dept. U.S. Army 1775–1940* (published by Army Medical Bulletin) pg 92.
- Permanent Lieutenant Colonel, Regular Army, 15 May 1917. Colonel National Army, 26 January 1918. Brig. General National Army, 9 May 1918. Maj. Gen., USA, Asst. SG AEF, 30 October 1918.
- 10. Kean interview, op cit.
- 11. Interview with Col. Herbert N. Dean, MAC, Ret., April 12, 1950.
- 12. SGO Folder 50135, War Rec., Nat'l Archives.
- 13. Interview with Brig. Gen. Albert E. Truby, M.C., Ret., June 27–28, 1950.
- 14. Stayer interview, op cit.
- 15. Truby interview, op cit.
- 16. Ibid.
- 17. Interview with Brig. Gen. J.E. Bastion, Sept. 14, 1950; A.E. Truby interview, op cit.
- 18. A.E. Truby interview, op cit.
- 19. Ltr frm H.W. Jones, Col., M.C., Ret. to writer Aug. 12, 1951.

- 20. Bastion, Close, Dean interviews, op cit.
- 21. Annual Rpt WRGH, 1917.
- 22. Ibid.
- 23. Hist. of WRGH, prep. in 1921, on file Library, WRAH, pg 22.
- 24. Annual Rpt TSG, 1917, pg 230 (based on F.Y.)
- 25. Hist. of WRGH, op cit, pg 26.
- 26. See Annual Rpt WRGH 1918 for detailed listing.
- 27. Maj. Wm. C. Borden, The Walter Reed General Hospital, Mil. Surg., Vol. XX, 1907, pgs 20-35.
- 28. Ltr. Jefferson Randolf Kean to W.C. Borden, Dec. 20, 1927 (hand written) filed in Borden scrapbook.
- Ltr. Harold W. Jones, Col. U.S. Army, Librarian AML to Colonel Daniel L. Borden, Commanding, Station Hospital, Fort Eustis, Virginia, Dec. 28, 1942 (SPMCL). Original in Borden Scrapbook; GO 64, 24 Nov. 1942.
- 30. Activated Nov. 1, 1942 and declared surplus in the general reduction of force, 30 June 1946.
- 31. Hist. of WRGH, op cit, pg 56.
- 32. Hist. of WRGH, op cit, pgs 57-61.
- 33. Hist. of WRGH, op cit, pg 33.
- 34. *Ibid*, pg 48.
- 35. *Ibid*, pg 55.
- 36. Ibid, pg 51.
- 37. *Ibid*, pg 110.
- 38. Government Issue.
- Annual Rpt TSG...1918, pg 446; Ext. from ARC Nat'l Convention San Francisco, California, Hospital and Recreation Service Round Table, May 3, 1938 (Miss Margaret Lower's statement). On file Archives, ANRC.
- 40. Med. Dept. Hist.... Vol. 5, pg 319, 320.
- 41. *Ibid*, pg 314.
- 42. Annual Rpt WRGH, 1918.



- 43. P.M. Ashburn, A History of the Medical Department of the United States Army, Boston & New York, Houghton-Mifflin, 1929, pg 329.
- 44. Interview Ida W. Danielson, June 7, 1950; Lt. Col. Elida Raffensperger ANC, Ret., 26 June 1950.
- 45. Interview Jessie M. Braden, June 26, 1950; Miss Dora Thompson, former Supt. ANC; Miss Bernice Hansen, ANC Ret., July 18, 1950 (tel.).
- 46. Ashburn, op cit, pg 369.
- 47. Florence A. Blanchfield, Organized Nursing and the Army in Three Wars, MSS on file HD SGO, pg 48–150.
- 48. Surgeon General's Office.
- 49. Interview with Miss Dora Thompson, former Supt. ANC, March 18, 1947.
- 50. Biography of General J.R. Kean, op cit.
- 51. Blanchfield, op cit.
- 52. Hist. Med. Dept....Vol. 5, pg 302, 303.
- 53. Interview Miss Anne W. Goodrich, First Dean ASN, June 21, 1947.
- 54. Interview with Miss Dora Thompson, Supt., ANC, *op cit*; Miss Anne Williamson, director ASN during this period; Col. Florence A. Blanchfield, Supt., ANC, and approximately 8 Army Chief Nurses familiar with the Corps history.
- 55. Temporary promotion.
- 56. Annual Rpt WRGH, 1918.
- 57. Annual Rpt TSG... 1917, pg 323.
- 58. Army Register, 1918, pg 29.
- 59. Annual Rpt TSG... 1917, pg 300.
- 60. *Ibid*, pg 301.
- 61. Hume, *op cit*, pg 69.
- 62. Annual Rpt TSG... 1917, pg 324.
- 63. Annual Rpt TSG... 1918, pg 440.
- 64. App. Ass't. Surgeon March 1881.
- 65. Annual Rpt TSG... 1918, pg 443.

- 66. Charles Richard, one file ahead of Arthur, retired about five weeks after General Gorgas.
- 67. Interview with Brig. Gen. Albert G. Love, MC, Ret., Feb. 13, 1951.
- 68. Ltr Welch to Garrison, Sept. 13, 1919, Collection... op cit.
- 69. Thompson interview, op cit.
- 70. Interview with Brig. Gen. Jefferson R. Kean, August 17, 1950.
- Ltr Welch to Pres. Wilson, July 15, 1918, hand-written. Also ltrs from Welch to Baker, collection... op cit.
- 72. Phalen, Chiefs of the Medical Dept.... op cit, pg 94.
- 73. Conversation, Col. James C. Kimbrough, MC, Ret., Feb. 5, 1951.
- 74. Kean interview, op cit.
- 75. Love interview, op cit; Interview with Col. John Huggins, MC, Ret., Apr. 20, 1950; Interview with Brig. Gen. Frank Keefer, MC, Ret., Apr. 20, 1950; Interview with Col. James D. Fife, MC, Ret., May 26, 1950; Interview with Col. James F. Hall, MC, Ret., Apr. 17, 1950, Aug. 8, 1951.
- 76. B.G. Nat'l Army vacated Nov. 29, 1918; Retired Dec. 2, 1918, by order of the President.
- 77. Interview with Mrs. Aileen Gorgas Wrightson, July 18, 1950.
- 78. Acc. to General A.E. Truby, Noble pursued the issue of Arthur's retirement; Gorgas was apparently unwell by this time. Two years later he died suddenly of apoplexy, Ashburn, *op cit*, pg 295.
- 79. Conversation, Miss Mary E. Schick, Librarian, WRAH, Feb. 5, 1951.
- 80. William Hemple Arthur, (obituary). Washington Post, April 20, 1936.