

# Chapter IV

## THE QUEST FOR DENTISTS IN THE US ARMY, 1865–1898: “THE LAW MAKES NO PROVISION FOR THE EMPLOYMENT OF DENTISTS”

### *Introduction*

From the end of the Civil War through the turn of the century, American dentists never ceased their efforts to win recognition of soldiers’ dental needs. Whether decorated veterans or ordinary civilian dentists who wanted the best for the troops, practitioners were frustrated by the opposition of the Army surgeon general and the Medical Department. Their petitions, letters, and inquiries to the Army surgeon general concerning dental hygiene, the lack of professional dentists in the service, the possibility of commissioning or employment, and other issues pertaining to dentistry received responses such as “the law makes no provision for the employment of dentists.”<sup>1,2</sup> That answer only further fueled their efforts to bring the benefits of modern dentistry to the American soldier.

### *Continuing Efforts for Dental Legislation*

In 1868, 3 years after the end of the Civil War, Senator Hannibal Hamlin of Maine drafted a bill authorizing the appointment of dentists in the Army and Navy.<sup>3,4</sup> The bill was passed to the committee on military and naval affairs, where it subsequently died, likely because of the presumed financial requirement. On December 29, 1869, Findley Clark, undeterred by the indifference of the legislators, proposed a resolution at the annual meeting of the Georgia State Dental Society in Savannah, ordering “that this society instruct their delegates to the American and Southern Dental Association to request said Association to appoint Dentists in the army and navy of the United States.” After some debate, it passed.<sup>5</sup>

At the second annual meeting of the Southern Dental Association in New Orleans, on April 13, 1870, Clark read a paper titled, “The Employment of Dentists in the Army and Navy,” that began with his resolution. Clark made it clear that his experience with Sherman’s troops in Savannah in December 1864 had prompted his strong support for military dentistry:

The innumerable quantity of broken teeth and fractured jaws, produced by bungling instruments and unfamiliar hands, along with stories of rheumatic and neuralgic suffering, caused by exposed pulps and diseased teeth, which we were obliged to listen to during the sojourn of the army in Savannah, were disheartening; and we determined then, should an opportunity ever occur, to contribute our mite [*sic*] towards a remedy.<sup>5(pp71–72)</sup>

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Clark strongly advocated that dentists be appointed to the military, stating:

No military school; no army post, or station; no naval ship, or foreign port where ships are stationed, should be without a dentist. Our sailors and soldiers are no more able to pay for dental operations than they are for medical attention; therefore, if we value their services, we should, as a humane and enlightened nation, value their lives. . . . But it is no easy matter to convince the appointing power. No doubt, could we make them look on the broken teeth and fractured jaws, and force them to listen to the stories of suffering, above mentioned; and better still, experience a little of the pain, there alluded to, away from the means of relief, it would not be long before this vacuum in our army and navy would be filled. But as we can not do this we must do what is next best, we must keep telling them until they do believe us.<sup>1,6</sup>

The majority concurred with Clark's viewpoint, and the association passed a resolution declaring dentists essential to the military. The resolution also established a committee to work with the American Dental Association (ADA) and other state associations to bring the subject to the notice of their congressmen. Clark, along with SJ Cobb of Tennessee, was appointed to represent the Southern Dental Association.<sup>6</sup> While little immediate action came from Clark's speech and resolution, it set the tone American dentists would take for the remainder of the century.

### *Army Dentistry in the 1870s*

Following the Civil War, the Army continued to expect its surgeons to perform all dental duties in addition to their medical and surgical functions. In April 1871 the Army was supplying post surgeons in the West with a "teeth extracting case" issued by the SS White Company of Philadelphia. On November 14, 1871, the surgeon general's office notified Dr James Garretson of Philadelphia that it wanted to add his book, *A System of Oral Surgery*, to the supply table when the second edition came out, if funds were available. In February 1872 the Army Medical Department ordered 150 copies of Garretson's book and issued it to the same posts that had been supplied with the extracting instruments, which were considered post property and were not to be taken when an individual was transferred.<sup>7-10</sup> Apparently, the surgeons were expected to read the book and, using the tools, apply its principles. On December 4, 1872, the department ordered 50 more copies through the chief medical purveyor in New York. In January 1881 the surgeon general's office ordered 25 copies of Dr JW White's book, *The Teeth: Natural and Artificial*, also for the surgeons to use as reference.<sup>10</sup>

During these years, many dentists continued to serve in a variety of military positions in the Regular Army and the militia or National Guard, but not as dentists. For example, Dr Charles Parmele Graham (1839-1904) of Middletown, Connecticut, who began his dental apprenticeship in the office of Dr Luther Parmele in 1858, enlisted in the 2nd Regiment, Connecticut National Guard, on December 8, 1871. He was commissioned a lieutenant within 9 months. In 1885 he was promoted to brigadier general and served until March 1890. When Governor O Vincent Coffin assumed office in 1895, Graham was appointed his adjutant general.<sup>11</sup>

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Another dentist, Dr N Malon Beckwith (1845?–1894) of New York City, served in Company B, 7th Regiment, New York National Guard, for 17 years, while Dr John Meyer (18??–1918) of New York City enlisted in the 9th Regiment, New York National Guard, in 1871 and served until 1884 as an orderly sergeant. Dr Wilbur Litch (1840–1912) of Philadelphia, who received his DDS in 1861 from the Pennsylvania College of Dental Surgery and his MD in 1865 from Jefferson Medical College, served several years in the US Army Medical Department. His last assignment was as post surgeon at Fort Yuma, California, after which he resumed his civilian dental practice in Philadelphia, was editor of *Dental Brief*, and frequently commentated on Army dentistry issues.<sup>12–14</sup>

### *Dentistry in the Frontier Army*

Colonel George Adair, who served in the Army Medical Department from 1874 to 1909, told of his experiences practicing dentistry in the isolated, Indian-fighting garrisons on the Western frontier. Recalling his early days as an assistant surgeon in the Department of Texas in the 1870s, he wrote:

In an humble way, I raised the status of dentistry in the army. I had extracted a few teeth in civil practice before entry into the service; but was by no means an expert. At the time, by general custom, the Hospital Stewards extracted the teeth. Observing their operations, I felt convinced that the ancient barbers did better work. An inward reaction prevented me from assigning to a steward, work that I could do better myself. It was not conscience. To see a steward shutting his eyes when he pulled, and listen for the expected crunch or snap of a crushed or broken molar—to use expressive modern speech—got on my nerves. Did I not sacrifice many teeth that might have been preserved for several years of usefulness by filling? Yes. Dentists were scarce on the frontier. An annual visit by a traveling dentist was all that could be expected, and that was uncertain. The dentist was always welcome and an office provided for him at the hospital. A busy week in the garrison showed that I had left some business for him. Upon the whole, I believe that I did more good than harm with my inexperienced dentistry. . . .<sup>15(pp108–109)</sup>

The frontier soldier's lack of access to dental care guaranteed extended dental problems and discomfort. Examination of the remains of soldiers killed at the 1876 Battle of Little Big Horn indicated a wide spectrum of dental problems, largely because of poor hygiene. Almost all the remains showed heavy tobacco use, substantial antemortem tooth loss, carious lesions, and alveolar resorption.<sup>16</sup>

### *The Townsend Bill of 1872*

In 1872 a group of academic and private dentists submitted a petition to the 42nd Congress, urging the appointment of dental surgeons at the two service academies. These surgeons would meet a long-standing need and encourage substantial health and morale gains among the cadets and midshipmen. Having dentists on staff would assure expert treatment, save duty time currently lost at private dentist visits, and reduce the incidence of deferred treatment. A number of prominent civilian dentists put their names to the petition, including professors Williard

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Parker, James Wood, John Metcalf, William Van Buren, Frank Hamilton, Fordyce Barker, and Alexander Mott, and doctors John Peters, George Peters, Charles McMillian, Edward Bradley, and Leroy Milton Yale.<sup>4</sup>

As a direct result of this petition, on April 1, 1872, Congressman Dwight Townsend of New York introduced a bill (HR 2140) that created professorships of dental surgery at the US Military Academy in West Point and the US Naval Academy in Annapolis. The bill was read twice and referred to the House Committee on Military Affairs.<sup>17</sup>

On April 19, after studying the proposed bill, Secretary of War William Belknap asked Colonel Thomas Ruger, West Point's superintendent, about the need for a dental surgeon and why dental duties could not be performed by the medical officer on the post. On April 23 Ruger replied:

There is no necessity therefor [*sic*], as the Academy is now provided with a thoroughly competent Dentist [William Saunders], who is a Hospital Steward on Special service for the purpose. A moderate charge is allowed for service for Cadets, which when approved by the Superintendent of the Academy is entered against their accounts with the Treasurer and paid as are other charges. The present arrangement gives entire satisfaction.<sup>18,19</sup>

Ruger also argued that the cadets should pay their share of the cost of their dentistry, and when and if the "present arrangement" had to be changed for any reason, the "item for the pay of a dentist" could be inserted in the academy's yearly congressional appropriation. Saunders had been named the official dentist for the cadets at West Point in 1872 and became the first person officially designated as a dentist in the history of its medical department. He retained his position as post dentist and continued his dental practice as the "Dentist to the Corps of Cadets" at West Point until his death in August 1906.<sup>20,21</sup>

On April 27 the secretary of war submitted Ruger's response to the House Committee on Military Affairs, which, on May 8, decided to reject the bill. Dr AP Merrill, the vice president of the American Academy of Dental Surgery, suggested there had been "some influence brought to bear on the Committee" on behalf of the hospital stewards. However, without the support of West Point officials, the bill was doomed to fail. As an indirect result of Townsend's bill, Dr Thomas Walton, an 1856 graduate of the Baltimore College of Dental Surgery, was appointed to the US Naval Academy with the rank of acting assistant surgeon in 1873. (Discharged on June 30, 1879, Walton served as a contract dentist until 1899. He died the following year.)<sup>22-24</sup>

### *Continuing Lack of Dental Treatment for Veterans and Active Duty Soldiers*

Many veterans with maxillofacial injuries looked to the War Department for continued medical help after the war. However, several were denied treatment because their injuries were not specifically covered under Army Regulations. For example, in September 1870, John Johnston of Penn Run, Pennsylvania, a veteran of Company A, 61st Pennsylvania Volunteers, applied to the surgeon general's office for an "artificial cheek" to repair a wound he received as a 17-year-old at the battle of Spotsylvania Court House. A piece of shell had torn off four inches of his

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face from his left ear to the corner of his mouth, and his malar bone was broken off at the ear about halfway to his left eye. He wanted an artificial cheek to be made by a "Surgeon Dentist," which would cost \$75.<sup>25</sup>

On March 2, 1871, the surgeon general's office informed another veteran, CW Beamendorfer of Lebanon, Pennsylvania, that "commutation" could not be paid for the "loss of the Jaw, or other injuries" that were not specified in the Act of June



*William Saunders, the first person officially designated as a dentist at West Point.  
Photograph: Courtesy of US Military Academy Archives, West Point, NY.*

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17, 1870 (which authorized the surgeon general to furnish artificial limbs to disabled soldiers). In a follow-up letter to Beamendorfer's congressman dated April 1, the surgeon general wrote that the claim for injury to the lower jaw was rejected because there was no "kind of apparatus" available to treat the wound. Nothing of the type had ever been furnished by the government; therefore there was no criterion for judging Beamendorfer's claim. In addition, the surgeon general believed that the acts of June 17 and 30, 1870, were intended to refer to "lesions of the limbs" and other classes of injuries that could be treated by "mechanical appliances."<sup>8</sup> Similarly, on August 7 that year, the surgeon general's office informed John Murphy, a Massachusetts veteran, that his application for an artificial denture was rejected because there was no "appropriation" available from which such "an apparatus" could be funded.<sup>8</sup>

On June 19, 1872, the surgeon general's office told Patrick Fitzpatrick of Hampton, Virginia, a veteran of Company C, 88th New York Volunteers, that the "laws relating to artificial limbs" were not applicable to his injured lower jaw. However, if he would send a description of the "apparatus" he required, the name of the maker, and the cost, his case would be considered. On July 15 Fitzpatrick was notified that he would have to go to the office of Dr CB Davis, a dentist in Philadelphia, for treatment. Davis was to make a denture to "furnish a portion" of the lower jaw for \$30, for which the government would pay.<sup>10</sup>

Those on active duty could expect the same limited support for dental matters as veterans. On February 20, 1873, Second Lieutenant George Spencer of the 19th US Infantry stationed at Jackson Barracks, Louisiana, wrote the surgeon general requesting information "concerning the medical treatment of officers and enlisted men of the US Army, for diseases of the teeth." Spencer wanted to know what to do when the attending surgeon was "not competent to give the required treatment in order to preserve the teeth from decay," and if a dentist could be employed "to perform the necessary work" at government expense. On February 26 the surgeon general's office replied that the "government will incur no expense for dental operations."<sup>26</sup>

On October 13, 1874, Dr JS Charles, an Omaha, Nebraska, dentist, wrote to the surgeon general concerning the benefits of dental care for the soldiers on the Western frontier, telling him that "unskilled" surgeons were forced to perform "minor operations of dentistry." On October 17 Joseph Barnes, the Army surgeon general from 1864–1882, replied that the question had been "agitated at intervals for several years but as yet with no practical result." However, he said he would be happy to confer with Dr Charles's congressman on the subject at the upcoming session of Congress.<sup>27,28</sup>

Four years later, things were little improved. On December 17, 1878, the surgeon general's office informed First Lieutenant Valery Havard (1846–1927), an assistant surgeon stationed at Chattanooga, Tennessee, that the Medical Department would not pay for a dental operation required by Corporal John O'Connor of Company A, 18th Infantry Regiment. O'Connor needed an apparatus for "a plug and its support for an alveolus communicating with [the] superior maxilla." The cost was about \$50. The surgeon general's office told Havard that the

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Medical Department had “no appropriation” from which such expenses could be paid.<sup>29,30</sup>

This situation for the common soldier continued to the last days of the Indian wars. In 1891 Quartermaster-Sergeant Charles Campbell, 7th Cavalry, was shot through the mandible during the engagement at Wounded Knee in December 1890. The bullet shattered the anterior part of the mandible from his right second bicuspid to his left second molar. The initial treatment by the Army surgeons consisted of removing the loose teeth and bony fragments and closing the external lip and cheek wound with sutures. The fracture failed to unite and the fragments of bone sequestered, leaving the posterior segments freely movable. After 6 weeks, Sergeant Campbell was referred to Dr John Patterson of Kansas City, Missouri, who described his treatment:

I banded the first lower molar upon the right side and also the first upper molar upon the same side, attaching lugs to the bands for the reception of a screw, and firmly screwed them together. I then placed a jack-screw upon these molars on the palatal side and against the molar on the left side, and forced that side into its correct position, which had been determined by models beforehand. I then banded the upper and lower teeth upon this side as upon the other, and screwed them firmly together.

I then dismissed the patient for ten weeks, the intention being to overcome the growth of cicatricial tissue, which forced the left side against the tongue. I believed the abscesses were caused by the movement of the loose ends upon the soft tissue, and the result proved that this surmise was correct, as they soon healed after the parts were secured firmly to the upper jaw.

At the end of three months the patient returned. He reported himself as very comfortable, save only that he was limited entirely to soft foods. On the removal of the bands the left side, after two or three days, swerved slightly inward and there remained, not quite, but nearly in correct position. I then proceed to make the splint-bridge. . . . It has been worn for six months, and the patient, whom I saw four weeks ago, says he is a new man, and his appearance holds the statement true. He eats solid foods with comfort, and the splint-bridge is a success. I am watching the case as to the growth of new bone where it is entirely gone. He is a young man in good health, and the chances for this are good.<sup>31</sup>

Patterson also commented on the cooperation he had received from the surgeon at Fort Riley, Captain John Van R Hoff, who took care of the external wound of the lip, preventing permanent disfigurement. In his opinion, cooperation between the two professions was in the best interest of the patient and gave the best possible results.<sup>31</sup>

In February 1893 Dr Benjamin Catching of Atlanta urged the readers of the *Southern Dental Journal and Luminary* to lobby their congressmen for a military dental bill. He remarked that since a post was established in Atlanta, he had been besieged by calls from the “ordinary soldier,” unable to pay for expensive dental procedures made necessary by the “lack of opportunity” to have the proper routine dental treatment.<sup>32,33</sup>

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### *"No Authority" for the Appointment of Dental Surgeons*

On August 6, 1874, at the annual meeting of the ADA in Detroit, Dr Frederick Rehwinkel, a Civil War veteran and the chairman of the ADA's Committee for the Appointment of Dental Surgeons to the Army and Navy, reported that the committee had decided the proposed action to secure the appointment of dental surgeons was "premature." Because Congress was cutting expenses, the timing was poor; therefore, it would be better to let the matter rest for the present. The report was accepted and the committee discharged.<sup>33</sup>

On August 30, 1875, Merrill, the vice president of the American Academy of Dental Surgery, wrote to Surgeon General Barnes concerning the appointment of physician-dentists to the Medical Department. On September 6 the surgeon general replied that there were no legal provisions for authorizing such appointments.<sup>34,35</sup>

That October at a special meeting of the American Academy of Dental Surgery held in New York City, Merrill presented a paper advocating dental surgeons for the services. He argued that the government should not demand "good sound teeth" when recruits entered the service and then fail to provide dental care "to save these valuable organs." He also remarked that General-in-Chief William T Sherman had said he was "'willing to admit the importance of this subject.'" Surgeon General Barnes, although stating that "in the absence of any proper legislation no appointment can be made," acknowledged all the "good influences" upon the health of "skilled Dental Surgery." Merrill also pointed out that the Army physicians were "not as liberal in regard to this question" as those in civilian practice.<sup>4,36</sup>

The same month, at the annual meeting of the Dental Society of the State of Maryland and District of Columbia held in Washington, a committee formed to induce the Army and Navy to collect data on tooth decay and disease reported that it was ready to submit a paper to the surgeons general of the two services. Six members of the society were selected to present the proposal to the government.<sup>37</sup>

On January 24, 1876, at the first session of the 44th Congress, Representative Benjamin Willis of New York, a former colonel of volunteers, introduced a bill (HR 1369) "to provide for the appointment of dental surgeons in the Army and Navy of the United States." Again, the bill was referred to the Committee on Military Affairs and ordered to be printed, but ultimately died.<sup>38</sup> On July 7 the House Committee on Military Affairs reported adversely on the petitions of George Miller and others asking for the passage of a law authorizing the appointment of dental surgeons for the Army, the committee seeing "no reason why the regular Army surgeons cannot render all proper dental service in the Army."<sup>39</sup>

On May 20, 1880, Dr JH Spaulding, a dentist in Fargo, Dakota Territory, applied to the secretary of war for "an appointment as Dental Surgeon" to the military posts of the upper Missouri and Yellowstone rivers. He wanted the "authority to visit such posts professionally when necessary." If no appointment could be made, he requested a "special permit" for the purpose. The secretary of war referred the matter to the Office of The Surgeon General. On May 27 Surgeon General Barnes replied to the secretary of war:



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Since the organization of the Army, it has never been necessary to employ a Dental Surgeon by the gov[ernmen]t for duty with troops and no provision or appropriation has ever been made for such purpose.

Individuals requiring Dental skill prefer to select the person they employ at their own cost and the quasi official endorsement of the applicant by a permit to visit certain posts in his professional capacity would establish a mischievous and troublesome precedent.<sup>40</sup>

On December 28, 1881, the subject was again introduced when Dr Frank Morrison, a dentist in West Chester, Pennsylvania, wrote to his congressman regarding "employment as dentist in the regular army." Once more, Barnes asserted that there was "no authority for such appointments" and that no one had ever been "employed in such a capacity."<sup>41,42</sup> Apparently he had forgotten about William Saunders's official work as a dentist at the US Military Academy.

Early in 1882 the *Philadelphia Times* published a colorful editorial, "Soldiers' Teeth," on the merits of a "corps of dentists" for the Army and Navy:

It may be argued that since the old cartridge has been abolished and the infantry have no more biting to do the government has no concern with the teeth of soldiers or sailors. This, however, is a selfish and superficial view. It is well known that a toothless soldier is not apt for half the duty that a well-stocked jaw can render the country. A paternal government cannot afford to close its eyes to the immense advantage to be derived from the sedulous preservation of its soldiers' teeth. A soldier with defective teeth, too, costs the government in doctors' bills, because it has been demonstrated that it requires the full force of an undiseased jaw to masticate the "hard-tack" thoughtfully provided for the military staff of life.

Aching, rotten or hollow teeth break down before the granite strength of this nutriment, and the physical system, responding to the lack of food, disables the soldier to take his place in the ranks. Again, the equipment of each regiment with a dentist will save gun-powder, for it is well known that to alleviate his misery the soldier is prone to fire off his tooth by means of a charge of powder. The picturesque but perilous form of dentistry sometimes blows out the offending tooth and not infrequently the unoffending jaw-bone. Now there are few that will seriously contend that a jawless soldier is either a useful or decorative object in garrison or field. Or if the heroic method be not adopted the soldier is apt to fill his mouth with fiery liquids, which, while temporarily assuaging the pain, are apt to end in stealing away the brain by way of the larynx. Nor is the old fashioned "clove" much more comfort, because, as is well known, the clove is the half-way house to the cocktail. Indeed, from whatever point of view this great question may be taken up the need of a dentist in the army is but too plain.<sup>43(pp62-63)</sup>

Dentists in Great Britain were fighting the same battle with the British services. In March 1882 the *British Journal of Dental Science* referred to the *Philadelphia Times* editorial and added that a corps of Army dentists was "a very practical sense of the useful"; a "toothless soldier," it said, was not able to render the same service to his country as one with a "well-stocked jaw." The author went on to say that

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in the “humorous” *Philadelphia Times* article, the Americans combined “an acute perception of the incongruous with a very practical sense of the useful.”<sup>44</sup>

In the spring of 1882 *Medical Record* expressed the general sentiments of the medical profession on the subject. After agreeing that there was an “apparent” need for dental care for the servicemen of both the Army and Navy, the *Record* cited some “practical difficulties”:

We have an army of only twenty thousand men scattered in small garrisons throughout the country. It would hardly be feasible to appoint a dentist for each garrison, and the dental surgeon would have, therefore, to be a rather expensive itinerant. In the navy the difficulty would be still greater. In both branches there would, no doubt, be considerable opposition to admitting dentists to equal rank with medical men. For dentists have no right to call themselves medical or surgical specialist, unless they have gone through the same kind of education and training as that to which the gynecologist, laryngologist, or oculist subjects himself.<sup>45(p94)</sup>

Again, the question of rank for dental surgeons was a barrier; a rivalry existed between physicians and dentists that sometimes outweighed the health of the soldier.

Regardless of editorials or international opinions, the Army surgeon general continued to maintain his position. In 1882 he received several queries regarding the appointment of dentists in the Army. In reply to a letter from Dr JJ Jennelle, a dentist in DuQuoin, Illinois, on March 2, 1882, the surgeon general’s office stated that there was “no authority of law under which appointment of Dentists could be made, nor has any one ever been employed in that capacity.” On March 20, 1882, the surgeon general’s office sent Dr RR Greene, a dentist in Fredonia, New York, the same reply. Saunders’s position as the official dentist for the West Point cadets was not mentioned in the letters.<sup>42,46</sup>

### *George H Perine’s Agitation, 1880–1882*

In September 1880 Dr George H Perine of New York, former editor of the *New York Dental Journal*, commented in *Dental Cosmos* on the current status of Army dental appointments:

It strikes us as not a little singular that a movement of such importance has of late received so little notice from the members of our specialty. To those who have given the subject consideration, the necessity of appointments of the character we refer to must be apparent. Sound teeth are among the physical requirements of soldiers and sailors, and certainly no physician or specialist will deny that attention to the preservation of these organs does much towards preserving the health of those in our country’s service, and that the evident lack of interest displayed by the government is highly reprehensible. For some years past the establishment of dental chairs in the State medical colleges and the treatment of dentistry as a specialty of medicine have been more or less agitated, and strongly advocated by a large number of the leading members of the profession, and it is doubtful whether any stronger argument can be advanced in favor of such a movement than that contained in this article. A union of dentistry with medicine would be a decided step gained in favor of the appointments herein suggested, in making which the government would incur no additional expense. Doubtless much of the opposition which advocates of the cause have had to

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contend with has arisen from the fact that few, if any, of our army and navy surgeons possess a knowledge of dentistry, and that the appointment of physicians practicing our specialty would necessitate a new order of things in this particular direction. At the military stations of the far West, and on board naval training-ships, the services of a dentist are often required, and much suffering is at times experienced for the lack of proper treatment of diseases of the oral cavity. There is no excuse for the indifference displayed by the government in a matter bearing so directly upon the sanitary condition of its servants.<sup>47(p56)</sup>

In September 1881 Perine, who had served as a member of the ADA's Committee on Dentists in the Army during the Civil War, wrote in the *American Journal of Dental Science* that the chief opposition to the appointment of dental surgeons was the prevailing fear among the civilian medical profession that they would displace some of the incumbent medical surgeons. Some argued that this would necessitate the creation of a "dental bureau," increasing the government's expense and resulting in less funding for the Medical Department. In response, Perine advocated the appointment of new candidates (when vacancies occurred) who had graduated from medical colleges where dental surgery was a part of the required curriculum, thus negating the need for a separate bureau.<sup>48</sup>

In the January 1882 issue of *Dental Cosmos*, Perine urged the dental profession to "exert their influence" with their congressmen to secure legislation for dental appointments in the services. He said that currently:

the extraction of teeth appears to be the only remedy resorted to in the service for the relief of aching teeth, and the operation, which is generally performed by an apothecary or hospital steward, is not infrequently attended by unpleasant, if not decidedly distressing results to the patient, for it must be acknowledged that in inexperienced hands the forceps are often productive of serious injury.<sup>49(p56)</sup>

In the meantime, Perine again recommended that candidates be selected on the basis of those "possessing a thorough knowledge of dental surgery." He also noted that servicemen's food was generally of a "coarse quality" and "insufficiently or improperly" cooked, which meant it was harder to digest and required better mastication.<sup>49</sup>

In May 1882 Perine's remarks in *Dental Cosmos* provoked response from Dr WF Hutchinson, one of the small group of preceptor-trained or graduate dentists who served in the US Army as enlisted hospital corpsmen or line soldiers, who was then stationed at Comba, Dakota Territory:

I have been in the army for the past four years, and have done a good deal of dental work, but have met with a great many difficulties; among them the want of a suitable place to perform the work, and the having so many other duties to perform as to preclude the possibility of giving it the necessary time and attention. But, throwing all difficulties aside, I have accomplished much good, especially in my own company, where I can have the men under my care every day. I have impressed on their minds the great necessity of saving the teeth by providing tooth-powders and mouth-washes best suited to each case; distributing Dr. White's little pamphlet, "The Mouth and the Teeth;" filling decayed teeth that would otherwise have to be extracted, etc. The men are all willing to pay for the work, but I think our government should form

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a special department in the medical department of the army and navy, and provide it with the necessary materials and appliances for the benefit of its soldiers and sailors. Dental surgeons could be appointed or employed as contract assistant surgeons now are in the medical department. The troops stationed on the frontier fare much worse than those close to the cities or towns. They cannot have their operations performed at all, for there are no dentists probably within three or four hundred miles, and consequently an aching or decayed tooth has to be extracted, often by inexperienced hands. It is a want that has long been felt both by the officers and the enlisted men of the army and navy. I propose that the national dental associations make the facts known at their next annual meeting to the Honorable Surgeon-General, and also hope to hear from others on this subject.<sup>50</sup>

In June 1882 Perine wrote in the *Southern Dental Journal* that several state dental societies (Alabama, Georgia, Iowa, Mississippi, Ohio, and Tennessee), the Pacific Coast Dental Society, and certain other dental organizations had already appointed committees to confer with their congressional representatives on the subject of a military dental bill.<sup>51</sup>

### *The 1881 American Dental Association Meeting*

While George Perine continued his efforts to mobilize the dental associations into action, change was also being considered at the ADA meeting in New York City. At the meeting on July 14, 1881, Dr GA Mills told members there was an organized movement among Army officers to petition Congress to appoint Army dental surgeons. He reasoned that if this effort was successful, surely the naval officers would join the movement. Mills offered a resolution supporting the measure, which the ADA adopted.<sup>52</sup>

One of several officers who spoke on the subject, Lieutenant H Whiting of the US Marine Corps said:

I consider the appointment of surgeons who possess a thorough knowledge of dentistry a necessity, and I believe the Government should and will before long take decided steps toward that end. Nowhere is the want of dental treatment experienced more than on board training ships and seagoing vessels (particularly at foreign stations) and in most cases the only remedy resorted to for an aching tooth is the forceps; hence many valuable teeth are sacrificed in the absence of proper dental treatment and other and more serious disorders often follow. From men now in my command that have served in the Army I have learned that the same state of affairs exists at the military posts in the far West. I am fully convinced that much suffering is experienced by soldiers and sailors from the lack of proper treatment of diseases of the teeth. Sound teeth constitutes one of the physical requirements of men entering the service, and it is but right that the Government should bestow upon its servants the care necessary to protect their health. Neither soldiers nor sailors can afford from their limited remuneration, to pay for dental treatment, and it is unjust that a man entering the service with sound teeth should lose them for want of proper care during the term of his enlistment.<sup>48(pp374-375)</sup>

Lieutenant Commander Oscar Heyerman, the executive officer of the receiving ship *Colorado*, agreed, saying, "I am decidedly in favor of the appointment of

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surgeons in the Navy who possess a knowledge of dentistry. The care of the teeth of sailors is a matter worthy of consideration, and I am greatly in favor of the movement." Major John Janeway, the attending surgeon at Headquarters, Division of the Atlantic, Department of the East, Governor's Island, New York, stated that he had "experienced the necessity of dental services in the Army, and that he had endeavored to supply the deficiency at all times so far as was in his power."<sup>48(p375)</sup> Consensus in favor of military dentists seemed to be everywhere except in the Office of The Surgeon General.

### *John Sayre Marshall: Advocate for Army Dentistry, 1882*

The most important person in the history of the US Army Dental Corps was Dr John Sayre Marshall (1846–1922). In 1882 Marshall entered the fight for dentistry in the Army and did not disengage until his retirement 30 years later. A former Civil War cavalryman from New York, he was a trained dentist, a graduate of Syracuse University's Medical Department (1876), and a dental and oral surgery specialist. In 1882 he moved to Chicago to practice with Dr Walter Webb Allport, a prominent dentist and one of the organizers of the Chicago College of Dental Surgery.<sup>53–60</sup> Marshall was also appointed an instructor of dental and oral surgery on the medical faculty at Northwestern University in Chicago.<sup>56,61–64</sup>

Early in 1882 Marshall began a study of the dental situation in the Army with the intention of making a presentation at the annual meeting of the American Medical Association (AMA) in Saint Paul, Minnesota. He began by writing to a number of prominent military and naval officers to request their views on the need for dental surgeons in their branches of service. Generals Ulysses Grant, William Sherman, Phillip Sheridan, and Winfield Hancock, along with Admiral David Porter, responded unanimously that the Union forces could have used the services of competent dental surgeons during the Civil War. Furthermore, they believed that a continuing need for dental care existed at the frontier forts. Personnel at remote duty stations were forced to travel hundreds of miles by horse-drawn ambulance, often through hostile Indian territory, to receive dental treatment, wasting considerable duty time. Admiral Porter added, "Dental surgeons would be of the greatest benefit to the navy, especially when on long cruises. Had the navy been provided with dentists when I was a youngster I should not now be gumming it."<sup>63</sup>

On April 6, 1882, Marshall wrote to Surgeon General Barnes requesting his written opinion of the "advisability and need of appointing Dentists" to the Army and Navy, provided they were "graduates in Medicine and Surgery." On April 12 the surgeon general informed Marshall that he declined "giving any opinion at present." Two days later, Marshall wrote to Barnes expressing his disappointment, suggesting that perhaps Barnes's "official position" might be "an embarrassment" for him. As a compromise, Marshall requested a list of the "proportion of *dental diseases*" treated by the US Army during the years 1879–1880.<sup>65–67</sup>

On May 4, 1882, the surgeon general's office sent Marshall a listing of the cases of dental diseases reported in the Army from July 1, 1878, to January 30, 1880 (Table 4-1).<sup>68</sup> Accompanying the chart was an acknowledgement of the probable underreporting of actual dental disease cases:

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*John Marshall, a trained dentist, graduate of Syracuse University's Medical Department, and a dental and oral surgery specialist.  
Photograph: Courtesy of the National Library of Medicine.*

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The Statistics, covering this class of cases cannot be relied upon as presenting a true exhibit of the frequency of dental diseases among U.S. Troops, since they do not commonly unfit a soldier for duty, and his name therefore does not often appear upon the monthly reports of sick and wounded from which the above figures are compiled.<sup>68</sup>

On June 7 Marshall used this data in his first detailed report, titled "The Need of Dental Surgeons in the Army and Navy," which he presented to the section on dental and oral surgery at the AMA's annual meeting in Saint Paul.<sup>69</sup> He reminded his audience that the physical requirements for enlistment in government service called for "sound teeth" as a prerequisite, yet once in the service, no dental care was provided. Recognizing the fact that it was no longer necessary for the soldier to bite off his powder cap, he suggested that the sailor still needed good teeth to serve as "an extra pair of hands." He used this illustration: "Many times when reefing topsails in a gale of wind, he is obliged to maintain his position by holding on with his teeth, while his hands are engaged in passing the 'gasket.' The knife, the end of a rope, and many such like things have to be held between the teeth while going aloft."<sup>70</sup>

Marshall also called attention to the fact that the "nature" of the service food required healthy teeth. The food was often dry, hard, and incompletely cooked; he quoted one "old salt" as saying: "The 'hard-tack' furnished by the government was marked B.C. (Before Christ), and the beef was so hard that it made good material from which to carve tobacco-boxes."<sup>70(p493)</sup>,<sup>71</sup> With "diseased teeth," the food was apt to be swallowed before being "thoroughly masticated," which often left troops "unfit for duty" with gastro-intestinal problems.

Recognizing the important role of the surgeon in treating the other parts of the body, Marshall could not understand why diseases of the teeth and jaws were neglected. He said dental caries were "the most common of all diseases" and that few escaped them, including military personnel. Yet the government provided no treatment. The soldiers on the frontier and sailors on long cruises were especially vulnerable. Often "odontalgia" drove the "poor victim" to seek relief by extraction at the hands of a "bungling" hospital steward.<sup>70</sup>

TABLE 4-1

### DENTAL DISEASE INCIDENCE IN US ARMY, 1878-1880

	1878-1879		1879-1880	
	White	Colored	White	Colored
Mean strength	21,848	1,964	22,096	2,364
Toothache	52	12	44	17
Dental caries	5	0	7	0
Alveolar abscess	1	0	0	0
Dental abscess	0	0	1	0

Reproduced from: National Archives and Records Administration. Letters Received, 1818-1889. Record Group 112. Captain Benjamin F Pope to Dr Marshall, 4 May 1882. No 2052. Box 124. Entry 12.

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Marshall also recalled the great success of Dr James Baxter Bean's interdental splint in treating fractured jaws and gunshot wounds during the Civil War; he argued that dental surgeons would be a valuable asset in treating such injuries in the Army hospitals.<sup>70</sup> At the time, Army and Navy surgeons were opposed to the appointment of dental surgeons, and he concluded that they did not think the problem of dental disease was important enough to justify dental specialists. The 1878–1879 tabulation of dental disease by the Army surgeon general's office showed that of 23,812 US soldiers, there were only 64 toothaches, 5 dental caries, and 1 alveolar abscess, for a total of 70 cases (1 case per 340 soldiers). The 1879–1880 tabulation for 24,460 soldiers listed 61 toothaches, 7 dental caries, and 1 dental abscess, for a total of 69 cases (an average of 1 case per 354 soldiers). Marshall believed that the small number of dental caries was incongruous with the incidence in civilian practice.

The Navy's Bureau of Medicine and Surgery's report on dental disease for 1878 failed to even list dental caries. It reported only 24 cases of odontalgia for the Navy's 7,806 sailors. The Navy chief of the bureau, Commander Philip Wales, told Marshall:

The Bureau of Medicine and Surgery does not think it advisable, or in the interest of the government to have a separate corps of specially educated dental surgeons. That the necessity does not exist is shown in the reports of the Surgeon-General of the Navy for the years 1879 and 1880, where, in 23,875 cases of disease, there were but 59 of odontalgia and other troubles of the teeth. This very small fraction is due to the fact that in all physical examinations of aspirants for appointment in the navy, persons with defective teeth are rejected.<sup>70(pp495–496)</sup>

Marshall surmised that if these reports were accurate, it would be the dental profession's duty to advise all patients to enter the service to preserve their teeth. He concluded that the surgeons obviously "overlooked" dental diseases and considered them not worth mentioning in their reports. Consequently, their superiors were never aware of the problem.<sup>70</sup> To illustrate his point, Marshall quoted a personal letter received from an Army officer on the Western frontier:

There is, I suppose, among soldiers, as much need of dental surgery as among the same number of men anywhere else; but, as a rule, soldiers are recruited from the lowest walks of life, and are such as pay very little attention to the preservation of their teeth.

Army surgeons are supplied with most complete sets of instruments for *extracting* teeth, and they are kept at every post hospital. The surgeons and hospital stewards usually do all the extracting. Officers and their families, as a rule, so arrange to have all work necessary on their teeth done by their regular dentist when they are East, on leave of absence. . . . Army surgeons never attempt to fill teeth. They merely extract them.<sup>70(p497)</sup>

He also quoted Major General Winfield S Hancock:

Both officers and men of the military and naval service *need* professional skill in the care of their teeth. Whether the surgeons and their assistants are competent to deal



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with their necessities, or to relieve their sufferings, or prevent them until they reach civil assistance, is a question, which I am not prepared to answer. However, I think a fair discussion of this subject before your Medical Society would throw needed light upon it.<sup>70(p498)</sup>

In regard to the Navy, Marshall referred to Admiral Porter's comments in favor of dentists to help sailors properly chew their food and his regret that he had never had the service of a dentist available to him in his younger military days.<sup>70</sup> "If we had had dentists in the navy, I should not have been compelled to live on soft food to-day."<sup>70</sup>

In conclusion, Marshall said that all congressional petitions for a dental service would fail unless the service medical departments endorsed the recommendation. He suggested that the incorporation of dental disease statistics into the regular medical and surgical reports for the services would be the best method of justifying the need for dental surgeons.<sup>70</sup> The subject was discussed by the AMA section members; Dr JL Williams endorsed the paper; Dr DH Goodwillie agreed that Army surgeons should be educated in dental and oral surgery; and Marshall said that the new appointees should have both medical and dental degrees. It was decided that appointees should be able to perform amputations and other surgical procedures that might be necessary on the battlefield.<sup>69</sup>

Dr JB Lawrence wondered how easy it would be to get the Medical Department's endorsement for dental surgeons. From his own Army experience, he knew that any medical complaint "except toothache" would exempt a soldier from guard duty. "I have known of several cases," he said, "where soldiers suffering from severe cases of toothache were obliged to do guard duty, and had their complaints laughed at."<sup>72(pp11-12)</sup> Dr Walter Allport agreed, admitting that the medical officers were "ignorant in regard to the [dental] wants of their men," and recommended that the medical schools be "reformed" to correct this omission in their education. He also cited the previous efforts of Edward Maynard to secure dental appointments in the Army and Navy. But he was optimistic that Surgeon General Barnes would be sympathetic to the cause and offered the following resolution:

*Resolved*, That a committee of three be appointed by the Chair for the purpose of considering the subject of appointment of dental surgeons in the army and navy, and that the surgeon-generals of the army and navy, and Dr. E. Maynard, of Washington, be requested to co-operate with this committee.<sup>69</sup>

The resolution was adopted and Allport, Marshall, and Williams were appointed to the committee.<sup>69</sup> On August 18, 1882, Dr Truman Brophy, the secretary of the AMA section on dental and oral surgery, informed the Army surgeon general of the resolution, hoping that Army and Navy surgeons general would lend their support.<sup>73</sup>

The following June at the 1883 AMA meeting in Cleveland, the committee reported that because of a misunderstanding on the part of the "gentleman residing in Washington [Dr Maynard]," who was their line of communication to the surgeons general, nothing had been accomplished. Again, it was recommended that dental disease statistics be incorporated in the medical reports. The committee was extended for another year, but made little progress.<sup>74</sup>

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### *Ulysses S Grant's Epithelioma of the Tongue*

One of the most prominent 19th Century Army veterans, Ulysses S Grant, could have benefited from a trained corps of dental surgeons in the service, who might have even saved his life. At the recommendation of his physician, Grant consulted Dr Frank Abbott of New York City, a Union veteran, on November 8, 1884. Grant had been suffering for the previous week or so from pain on the right side of his head and face, which his physician attributed to the maxillary right first molar tooth. Barker recommended that it be removed. Upon examining Grant, Abbott found that this tooth was indeed "dead," with an "abscess at the apex of the anterior buccal root." In addition, it was elongated and the roots were covered with tartar. Dr Abbott extracted the tooth and Grant experienced immediate relief from his "neuralgia."<sup>75,76</sup>

On November 14 Grant returned to Abbott's office for a complete oral examination. Abbott found the maxillary right second and third molar teeth next to the extraction site to be elongated (due to missing mandibular opponents), and their roots "thickly coated with a dark brown or black tartar." He advised the immediate removal of these teeth, believing they were a contributing factor to Grant's tongue and throat lesion that had been diagnosed 5 months earlier.<sup>75</sup>

Grant's first cancer symptoms had appeared in June 1884. While eating some fruit, he observed that his "throat was sore," and that peaches, of which he was especially fond, gave him "great trouble." A series of medical referrals followed, which considerably delayed the diagnosis and treatment.<sup>77</sup>

It was not until the fall of 1884 that Grant was first seen by Dr John H Douglas, a highly respected throat specialist, for an "induration" of the tongue. Douglas's clinical examination revealed a well-defined, indurated lesion at the right side of the base of the tongue, which he diagnosed as cancerous. He assured Grant that his case was not hopeless and that he would start "judiciously conservative," non-surgical treatment, including rinsing his mouth and throat with astringent and antiseptic solutions to debride the odorous diseased tissue cells and applying silver nitrate, iodoform powder, and hydrogen peroxide topically to the tongue lesion. He also ordered Grant to stop smoking.<sup>77</sup>

Meanwhile, ulcerations appeared in Grant's mouth, changing his diagnosis to "epithelioma of the tongue and fauces." The base of the tongue on the right side of his mouth was "indurated to a slight extent." The lymph gland under the angle of his right jaw was also affected. The roof of Grant's mouth, at the hard palate line and to the right of the median line, had "three small warty-like excrescences," which showed a "tendency toward cell-proliferation." Grant also suffered from "pain in the right ear." This symptom was treated by a topical application of a 4% solution of cocaine. Cocaine was also administered by injection and iodoform was dusted upon the ulcerations.<sup>78</sup> Grant died on July 23, 1885, at age 64; the cause of his death was listed as "carcinoma of the tongue and tonsil with extension of the tumor into the hypopharynx and larynx."<sup>77</sup>

Some felt that Grant's death in 1885 was due to a disease of dental origin. Abbott, for example, theorized that Grant's broken molar caused the irritation of the base of the tongue, and the condition was aggravated by smoking.<sup>75</sup> The lesion turned cancerous, spreading to the pharynx and lymph glands, and by the time

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Grant sought treatment, it was too late.<sup>79</sup> In April 1885 the *Independent Practitioner* commented on the case, writing:

That the oral condition may be, and often is, a prime factor in inducing malignant tumors of the mouth, is a fact that cannot be too quickly and thoroughly comprehended. . . . The case should most certainly be thoroughly investigated from the dental standpoint, that it may prove of greatest benefit to others, for this instance is not at all unique.<sup>80(p210)</sup>

### *Dental Surgeons, 1886–1890*

At the annual meeting of the British Dental Association in London in 1886, Dr George Cunningham, a British crusader for dental health, preventive dentistry, and dentists in the British services (he received the degree of Doctor of Dental Medicine [DDM] from Harvard in 1876), spoke on “Dentistry in its Relation to the State.” In his paper, he attacked the lack of dental care in the British services and quoted from a letter of the Army surgeon general on the state of dentistry in the US Army:

The military academy at West Point has a regular dentist on duty, and it is believed that such is the case at the naval academy at Annapolis. In the army there are several accomplished practical dentists in the corps of hospital stewards, but these are exceptions to the rule. The medical department of the army has tried to arouse interest among medical officers in the matter of the care and treatment of the teeth, by furnishing such instruments as are needed on requisition. The dental cases in the supply list for issue, consist of an extracting case, and a small case for making excavations and temporary fillings. These latter are supplied only to frontier posts, where it is not practical to obtain the services of a dentist. . . . Congress has been appealed to on several occasions to authorize the employment of dentists, but, so far, has taken no definite action. It is probable, however, that, in time, proper provision will be made in this necessary and valuable branch.<sup>81(p12)</sup>

Even though Cunningham presented a more positive picture and admitted that “in time, proper provision will be made in this necessary and valuable branch,” the situation regarding dentistry in the Army remained unchanged. On December 29, 1886, Dr Charles Robb, a dentist in Pueblo, Colorado, wrote to the secretary of war asking many of the same questions as Cunningham: were dentists “employed” in the US Army; what were their rank and pay; and what was the procedure for securing an appointment? On January 6, 1887, the surgeon general’s office sent Robb the usual reply, saying that the “law makes no provision for the employment of dentists” in the US Army.<sup>82,83</sup>

At the 1887 meeting of the Southern Dental Association at Old Point Comfort, Virginia, Dr William Richards of Knoxville, Tennessee, spoke of the “lamentable condition” of the soldiers’ teeth stationed at the adjacent Fort Monroe, Virginia. He said that dentists should not interfere with the work of the physicians, but that the two professions should “cooperate with each other.” He urged the association to make an effort to draw the government’s attention to this matter.<sup>42,84</sup>

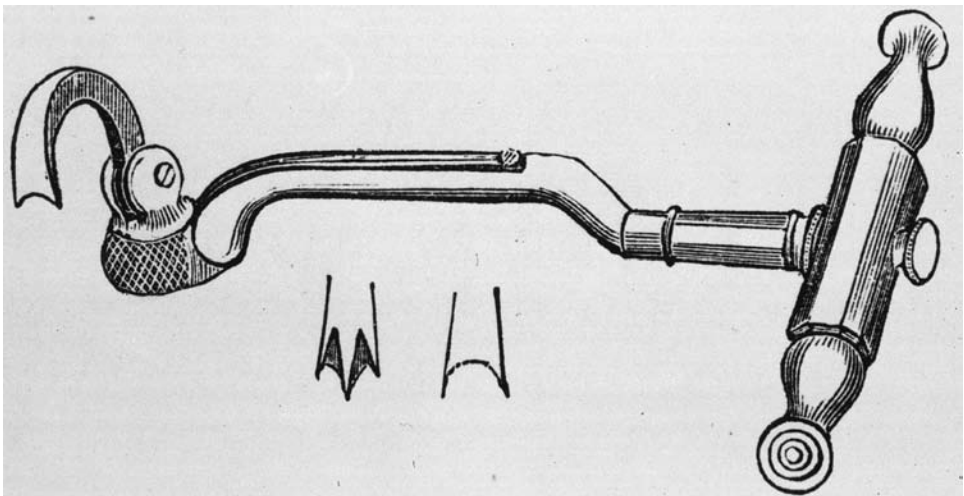
On March 20, 1890, during the first session of the 51st Congress, Congressman Robert Bullock of Florida, a former Confederate brigadier general, introduced

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a petition in the House of Representatives from the Florida State Dental Association, requesting that dentists be appointed in the Army and Navy. The petition was referred to the House Committee on Naval Affairs. On April 7 at the same session, Senator Matthew Butler from Edgefield, South Carolina, a former Confederate major general, presented a similar petition in the Senate from the same dental association requesting the establishment of “a bureau of dental surgery” for the Army and Navy. Again, the document was referred to the Committee on Military Affairs, but no legislation ever materialized as a result of either proposed bill.<sup>85</sup>

In October 1890 *Dental Headlight* pointed out that if the physicians in the military were as proficient in dentistry as they were in surgery, there would be no need for dental surgeons. However, this was not the case because they were “proverbially ignorant” of dentistry.<sup>86</sup> Despite their lack of training, the medical surgeons stationed at isolated western posts were frequently called upon to perform dental extractions. Major General William Gorgas (1854–1920), Army surgeon general from 1914 to 1918, recalled his early days as an Army post surgeon and the use of the dental key:

My early professional life for the first twenty years was spent in the west on the plains. I had all sorts of work, but a great deal of dentistry fell to my lot, and whatever came to hand, I endeavored to turn into the line of tooth extraction. . . . I flatter myself that I became exceedingly skillful in this. . . . In my early practice, forceps was beginning to be used; I acquired a tolerable degree of skill in the use of forceps, but felt absolutely certain I could succeed if I had the key. . . . You put the claws of the steel key under the tooth and by revolving the lever got the tooth



*Dental key, circa 1868.*

Reproduced from: <http://www.nlm.nih.gov/ihm/images/A/12/377.jpg>.  
Courtesy of the National Library of Medicine.

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out. . . . You always got the tooth, but the trouble was you sometimes got more than one tooth, . . . and frequently you took away a piece of the jaw. But most of my clientele were the Sioux Indians at this time, who had exceedingly firm jawed teeth, and my reputation was increased with the number of teeth I brought out at one extraction, and if I took away a small piece of the jaw I was considered still more skillful.<sup>87</sup>

Comments such as those of Gorgas merely confirmed the quandary in which dentists found themselves when dealing with the Army. On one hand, the Army upheld strict dental requirements for enlistment and reenlistment. On the other hand, it paid no attention to maintaining the dental health of soldiers once they were in the Army. In 1890 Army Surgeon Charles Greenleaf published his latest revised edition of *An Epitome of Tripler's Manual, and Other Publications on the Examination of Recruits*, which was used for many years as a guide for the Army's medical officers assigned recruiting duties. Greenleaf listed the precise dental standards to be met for enlistment or reenlistment in the US Army, but nothing was mentioned about maintaining dental health once in the Army.

### *"It is deemed impracticable": the 1890s*

In 1891 another formal effort to seek federal government support for military dental surgeons was channeled through the ADA's Committee on State Dental Laws and the Appointment of Dentists in the Army and Navy. On August 4, 1891, at the annual meeting in Saratoga Springs, New York, Dr Henry Briss Noble of Washington, DC, reported that he had personally presented the following letter, dated March 27, 1891, to Brigadier General Charles Sutherland, Army surgeon general from 1890 to 1893, and had been cordially received:

The undersigned Committee were appointed by the American Dental Association, at its last meeting, to consider the feasibility of the appointment of dental surgeons in the army and navy.

It is believed that the appointment of dental surgeons in the army and navy would be the means of relieving much suffering and saving the organs of mastication so necessary to health and comfort.

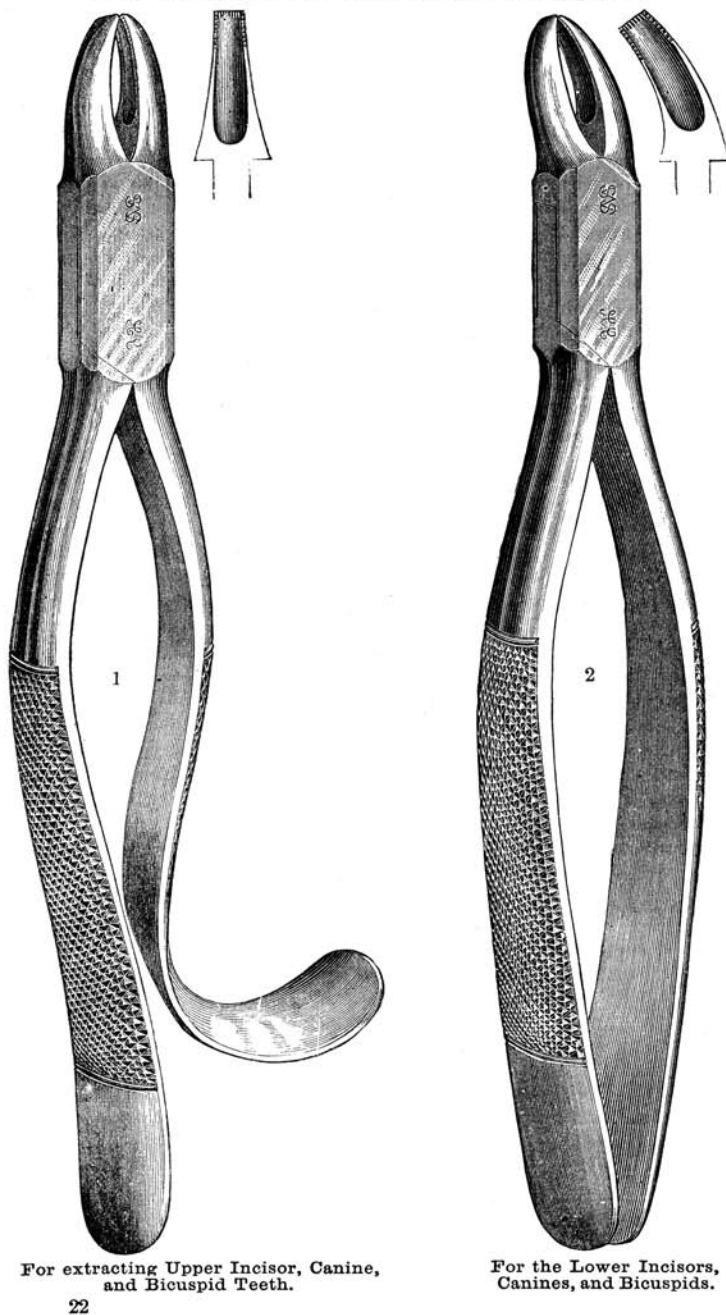
This want is especially felt in our Western military stations by both men and officers far away from any dental surgeon, often requiring them to send members of their families hundreds of miles to get the service of a dentist.

We should be pleased to have your opinion and advice on the above subject.<sup>89</sup>(pp20-21)

On April 13, 1891, Sutherland replied:

I am not in a position to speak as regards the Navy, but so far as the Army is concerned this is a matter which has been considered by the War Department on several occasions. So long as our Army is distributed in small bodies over a vast extent of

DR. CHAPIN A. HARRIS'S FORCEPS.



*Forceps style used in late 1800s and shown in Dental Cosmos (1878).  
Designer was reportedly under the supervision of Chapin A Harris.  
Courtesy of the US Army Medical Department Museum. Borden 017.*

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territory and is actually in the field for a considerable part of the year it is deemed impracticable to extend to it the benefits of skilled dental surgery, however desirable this might be on behalf of officers and men. Where troops are massed in garrison, as in a few instances, the military reservation is as a rule in the vicinity of some large city where the services of dental surgeons can be obtained.

I am of the opinion also, that the necessity for special dental service with the troops scattered over the West and South is less needful now than it was some years ago, for increased railroad facilities have brought the most remote posts within a few hours journey of some growing city.<sup>90,91</sup>

Noble sent the same letter to the Navy Surgeon General, JM Browne, who failed to reply. It seemed that the government saw little need for dental care because enlisted personnel served only a short time and could be rejected if they did not pass a preenlistment oral examination.<sup>89</sup>

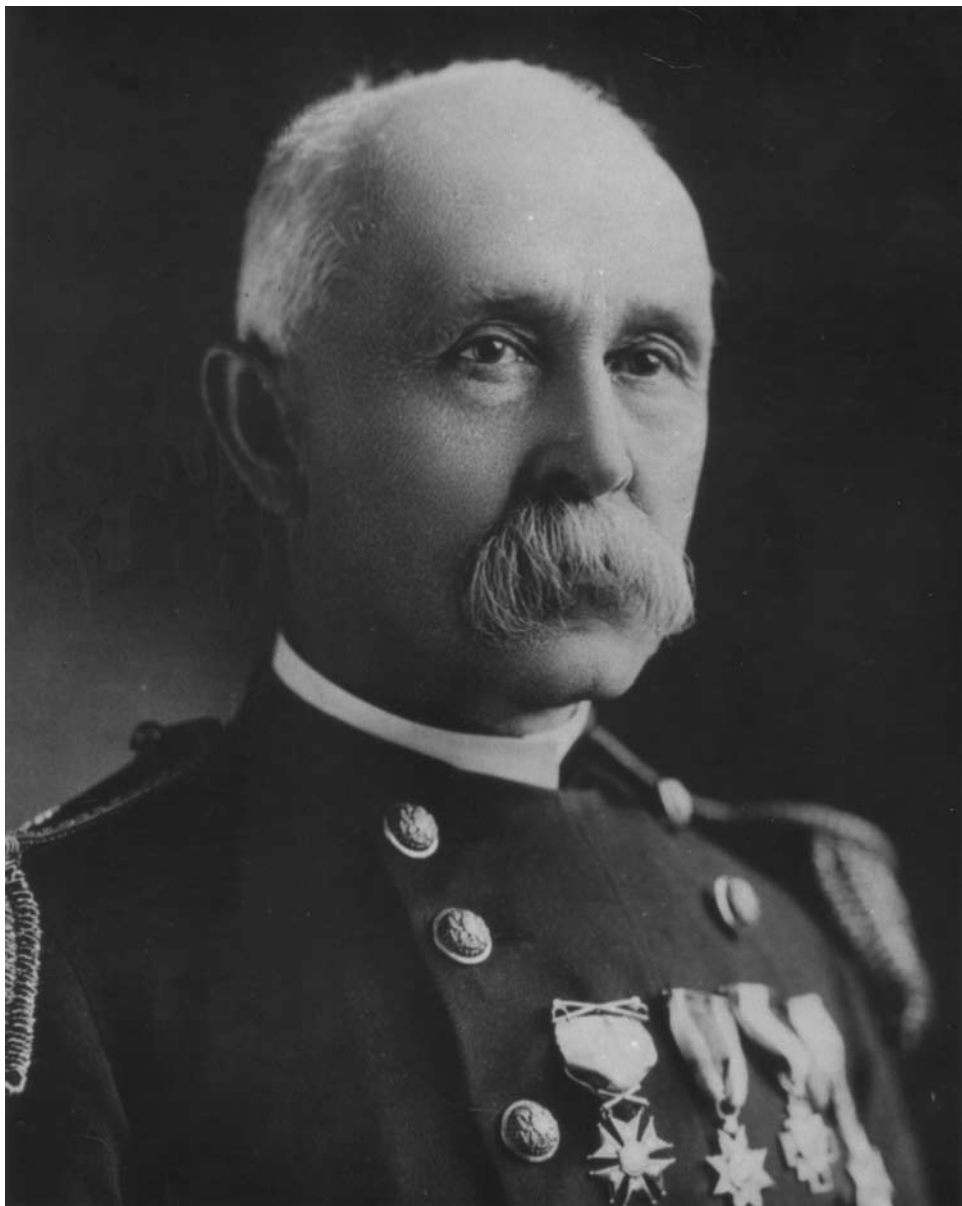
Dentists in the United States and Britain were not alone in their quest for proper dental care for their armies and navies. On August 17, 1893, at the World's Columbian Dental Congress during the World's Columbian Exposition in Chicago, the Committee to Promote the Appointment of Dental Surgeons in the Armies and Navies of the World (with members from England, Germany, Holland, Denmark, Russia, Switzerland, Italy, Canada, South America, and the United States) met and released a report. Dr M Whilldin Foster, the committee's chairman and dean of the Baltimore College of Dental Surgery from 1894 to 1914, concluded:

That opposition to such appointments came from the surgeons in the army and navy of the United States. The proposition to give the dental surgeon an equal grade with the surgeon was strongly opposed.

It was deemed the better course not to be too urgent at this time, but to send every year a copy of this request to the surgeon-general, to remind him that the effort to place the dental surgeon on an equal grade with the surgeon had not been abandoned.<sup>92</sup>

On September 9, 1893, the new and progressive Army surgeon general (served 1893–1902), Brigadier General George Sternberg (1838–1915), adopted the Medical Department's traditional position, informing Representative John Maddox of Georgia that there was no provision for dentists in the US Army.<sup>93</sup> On September 25, 1894, Richard Doran of Asbury Park, New Jersey, wrote to the War Department for information on military dental surgeons. The surgeon general replied that "no such office existed; the services of a dentist when required being paid for by the officer or enlisted man employing him."<sup>94(p70)</sup>

Despite this opposition to Army dental care, American dentists continued to push the issue at the level of the state and local dental societies. Early in 1897 the Ohio State Dental Society passed a resolution proposing that the government employ dental surgeons for the military. Dr Otto Arnold of Columbus, appointed as its official spokesman, emphasized the incongruity of the government providing soldiers with sanitary quarters, wholesome food, adequate exercise, medical treatment by competent surgeons, and hospitalization when required, yet making no "provision



*George M Sternberg, surgeon general 1893–1902.  
Photograph: Courtesy of the National Museum of Health and Medicine,  
Armed Forces Institute of Pathology. NCP 3564.*



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for his dental organs." He also mentioned that while the recruits' teeth had to pass the entrance physical, "the insidious process of dental caries" was still present and was "no respecter of persons." He deplored the fact that "extraction of the offending teeth" was the only treatment offered and that it was usually performed by hospital stewards, "men wholly without dental training." Arnold also declared that if dentists were on the examining boards, the dental standards of the Army would be elevated merely by their rejection of men with defective teeth. Further, dentists would be invaluable in treating gunshot wounds about the mouth and face.<sup>95,96</sup>

The editor of the *Ohio Dental Journal*, Dr Louis Bethel, urged a "united and organized effort" by the dental profession to secure the needed congressional legislation. *Dental Cosmos* endorsed the desirability of the proposal. Its editor, Edward Kirk, added another "cogent reason for the appointment of dentists in connection with our national defensive service," referring readers to Dr Alton Thompson's article in the same issue on the use of dental records for personal identification; *Dental Cosmos* was one of the first journals to propose forensic dentistry as a reason for commissioning Army dentists. Dr Rodrigues Ottolengui (1861–1937), editor of *Items of Interest: a Monthly Magazine of Dental Art, Science, and Literature*, supported the proposal and thought that the money spent for this service would be better spent than the government funds going to the pensions of Civil War veterans. Dr John Patterson, the editor of the *Western Dental Journal*, who had personal experience treating soldiers, agreed that this "humanitarian" objective should be supported by the entire profession. The measure also received support from England, the *British Journal of Dental Science* expressing its astonishment that the military of both countries could be so "supine" on such an important matter.<sup>97–102</sup>

The editor of the *Pacific Stomatological Gazette*, Dr Frank Platt, took a somewhat different view. He argued that the proposed legislation would be unable to attract "thoroughly competent and well-educated" practitioners because the rank and salary were not comparable to that of medical surgeons. He recommended that the Medical Department's assistant surgeons be required to be "graduates in both medicine and dentistry." This qualification would put the dentists on an equal basis with their medical colleagues. The editor of the *Dental Review*, Dr Alison Harlan, said the "question of rank" would remain the "stumbling block" it had been in the past. It was his opinion that:

Any rank less than that of second lieutenant or assistant surgeon would not be accepted by our profession. The rank of hospital steward or sergeant would not do for us after having spent three or four years in the study of dental surgery to attain such a position in the army and navy.<sup>103,104</sup>

On April 28, 1897, Murray Acklin, acting hospital steward at Jefferson Barracks, Missouri, wrote to the editor of *Dental Cosmos* in response to the Arnold proposal. He vividly described the soldiers' dental plight from extensive first-hand experience:

Soldiers cannot always go to a dentist, even though they always have the ready money to pay for their work. Take for instance some of our frontier garrisons, where there is not a dentist located within fifty miles or more of them, and one probably does not

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make a visit to the post once in a year; a soldier has an attack of genuine, old-fashioned toothache; it may be a good tooth, one that should not be lost by any means; probably with a few hours' work it could be made nearly as serviceable as ever. But there is no dentist near, and he cannot endure that pain until one comes, probably in six months, possibly longer, so what can the poor fellow do? Nothing but go to the hospital and have it extracted by the steward, and, if the steward is successful in getting it out, the man is relieved of his pain, but he is just one more tooth short; but if it happens to be broken off, and the worst part of it left in the jaw, a condition which very often prevails, the man is worse off than before. In this way thousands of teeth are lost, and eventually there must be many days' service lost to the government, resulting therefrom. Even when soldiers are stationed near cities where dentists are plentiful, they often have a hard time getting work done. The busy dentist must make engagements according to his time, while the soldier, not knowing what duty he may be detailed for, cannot make engagements two days in advance.<sup>105</sup>

On October 27, 1897, at the annual meeting of the sixth, seventh, and eighth district dental societies of New York, Dr CF Bentley of Niagara Falls, New York, read a paper titled "The Care of Army Teeth," and presented a resolution recommending that the various New York dental societies lobby their congressional representatives for dental corps legislation. Bentley emphasized the need for soldiers to have ready access to persons trained and qualified to provide full service dental care. His resolution stressed that no such skilled persons were available in the Army and that the average surgeon could not be expected to have such knowledge. He urged that dental societies throughout New York combine to educate their congressmen on the need and to press for appropriate legislation to give "practicing and competent dentists" military status.<sup>106</sup>

For some years, Bentley had been doing most of the dental work at Fort Niagara. In his experience, he found that the soldiers were "very careless about the care of their teeth, often seeking extraction, but usually having no funds for this purpose." He saw no reason why the government should employ surgeons, veterinarians, and chaplains and not dentists. The Bentley resolution was discussed and passed.<sup>106</sup>

### *An End to Complacency*

Pressure from dental professionals and their sympathizers was mounting to compel the War Department and Army surgeon general to recognize the need for official dental care for the troops. Only extraordinary and unprecedented requirements that could be neither ignored nor avoided could shake the War Department's resolve. These requirements appeared in 1898 when the United States unexpectedly acquired an overseas empire as a result of the war with Spain. A medical officer could no longer advise an ailing soldier with a serious dental problem to seek care from a local civilian dentist, for few of them could be found in such places as Luzon, Mindanao, or Oriente Province in the Philippine Islands, Cuba, or Puerto Rico, where American soldiers were now stationed. In addition, many volunteer soldiers who served and suffered would keep the issue alive upon their return to civilian life and subsequent rise to positions of influence.

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