Chapter VI

WISH BECOMES REALITY: DENTAL SURGEONS IN THE ARMY, 1898–1901

Introduction

While dentists served in many capacities in regular and volunteer units from Chickamauga to the Philippines, their civilian colleagues continued to fight for congressional legislation to establish a place for dentists in the US Army. The wartime experiences of dentists in uniform, Army line and medical officers, and enlisted soldiers confirmed the need for professional dentistry in the military. For American dentists and their professional associations and journals, the Spanish-American War initiated a new phase in the long campaign to achieve their goal of dental care for the soldier.

The Mason and Otey Bills

Before the beginning of the war with Spain, Congress tried to get the small frontier army ready, even introducing bills that addressed dental care. On April 16, 1898, at the 55th Congress, Senator Edmund Pettus, a former Confederate brigadier general, submitted an amendment to the proposed civil appropriation bill calling for the appointment of a "dental pathologist" for the Army Medical Museum, and on May 4, 1898, William Mason from Chicago introduced a bill (S 4531) to provide for the appointment of "a dental corps in the United States Army." 1.2

When the Mason bill was referred to the War Department for remark, Army Surgeon General George Sternberg considered the proposed legislation unwise, saying, "the policy of the Government has always been to make officers and enlisted men responsible for the care of their own teeth." (3(p70))

Three weeks later, Representative Peter Otey, a former Confederate infantry major from Lynchburg, Virginia, introduced a parallel bill (HR 10508) in the House to establish "a dental corps" in the US Army. The bill provided for an increase in the Medical Corps by the addition of a Dental Corps, "to be composed of one surgeon dentist to each brigade with rank of major, and one surgeon dentist to each regiment with rank of captain, etc." Each dentist had to be a graduate of a reputable dental college and have been in practice full time continuously for the last 5 years. Promotions, pay and allowances, and retirements would be the same as provided in the regulations for the Medical Corps, and all supplies would be furnished in the same manner as for the Medical Corps. The bill was referred to the Committee on Military Affairs. Otey's bill had been written by a friend and

constituent, Robert Morgan (1844–1904), another former Confederate infantryman now with a dental practice in Lynchburg. ^{1,4} Aware of the problem from their own experiences, many influential veterans were beginning to add their voices to the fight for military dental care.

On June 20 the Chicago Dental Society, the Odontographic Society of Chicago, and the Odontological Society of Chicago jointly endorsed a resolution calling for Congress to pass Otey's dental bill. The editor of the *Dental Review*, published in Chicago, also urged its readers to write to their congressmen on the bill's behalf.^{5,6}

In July the editor of *Dental Cosmos* and dean of the School of Dental Medicine at the University of Pennsylvania, Dr Edward Kirk (served 1895–1917), commented on the Otey bill:

As the initial step in securing the desired legislation has been taken, it is important that the bill be modified to such extent as may be necessary to best subserve dental interests in that relation, and that the needful effort to secure its passage by Congress be made at once, so as to avoid the prestige of defeat, which would necessarily impede any subsequent legislative effort in this direction.^{2(p593)}

Kirk also referred to the June 20, 1898, appeal of Dr Charles Stanley of Columbia, South Carolina, for all dentists to rally around the bill and pressure their congressmen for its passage. Stanley felt that dental surgery would be a "blessing" to enlisted soldiers.⁷

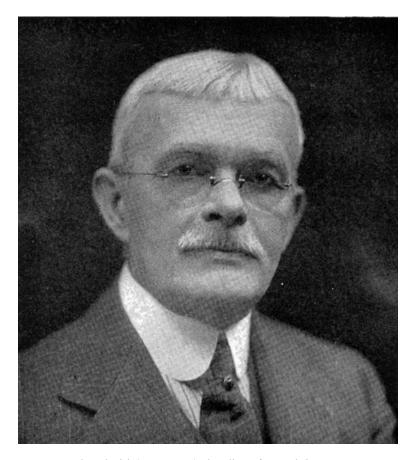
Also in July, Dr Jonathan Taft, the long-time editor of *Dental Register*, dean of the College of Dental Surgery at the University of Michigan (served 1875–1903), and supporter of Army dental care since the Civil War, called attention to the fact that dentists were employed in hospitals, asylums, and schools; it seemed illogical that their services not be provided to the soldiers and sailors serving the government. He recommended at least one dental surgeon be assigned to each regiment.⁸ Despite the groundswell of support from the dental lobby, which was backed by recent military experience, the dental bills failed to get past the Committee on Military Affairs because of the disapproval of the surgeon general and the War Department.

The Dental Journals Press the Issue

The failure of the Otey bill did not deter the dental societies and journals, which continued to press the issue. Dr B Holly Smith of Baltimore, Maryland, a member of the National Dental Association (NDA) who was active in pushing for military dentists, stated in a letter to *Dental Weekly*:

This abortive effort has, however, made several things plain: (1), that any measure introduced must be an expression of the best thought of the profession; (2), it must receive the unified and enthusiastic support of the same; (3), it must be placed in the hands of an experienced legislator.

When the measure is fairly launched during the next session of Congress, it will then be time for every man to use his personal influence with his representative, for unless we have a large majority of the law-makers prejudiced in favor of such legislation we will still have to reckon with the Surgeon-General. 9(p92)



Edward Kirk (1856–1933), the editor of Dental Cosmos. Photograph: Courtesy of the American Dental Association.

In August 1898 the editor of the *Indiana Dental Journal*, Dr George Hunt, wrote that if Army and Navy dental corps were created, preference should be given to those practitioners who went "to the front" as volunteers: "The dental surgeons who were willing to leave their practice and shoulder a rifle in defense of the country when the call was made for volunteers should have precedence over the stay-at-home contingent in selecting men to fill positions in this corps." ^{10(p811)}

Hunt also commented on the value of good teeth and on the Army's continuing contradictory position on dental health:

During the physical examination of the militia recently held, prior to mustering the men into the United States service, a large per cent were rejected on account of defective teeth. The Government wisely believes that good teeth are necessary to the proper mastication of army rations, and if all reports are true, the Government is eminently correct. Proper mastication of rations is essential to proper digestion and assimilation of them and on the correct performance of these latter functions rests the efficiency of the army. An army travels on its belly.

But mark the inconsistency of the methods in vogue at present! The Government enlists men, ordinarily, in the regular army for a period of five years. At present the term of enlistment for recruits is the same in the regular army as it is in the volunteer service, namely, the war or two years. During his term of enlistment the recruit is usually stationed at points where dental services cannot be obtained, and even if he is quartered in barracks adjacent to cities or towns, his monthly wages are so small that he can ill afford to spare the necessary money for the proper care of his teeth. 10(pp811-812)

Hunt related his own experiences performing dental work on personnel of the US Army garrison stationed at the Indianapolis Arsenal:

It was rare when anything but extraction was desired. It must be a pitiful sight to see a member of our regular army, one who has gained two or perhaps three stripes for his arm, showing ten or fifteen years in the service, chasing a hunk of hardtack or a slippery slice of army bacon around his mouth with his tongue and cheeks in an effort to anchor it where a lonesome superior second molar may crush it a little bit before it slides off of an equally lonesome inferior third molar. And this condition of affairs cannot help but obtain if the man is retained in the service.

To reject a recruit who has already served one or two terms of enlistment on account of defective teeth, when the Government is directly responsible for his defects is unjust and unworthy of a great nation. If good teeth are a necessity to the raw recruit they are equally valuable to the experienced soldier. And the fact that a soldier has a set of teeth in good condition at the time of his enlistment does not guarantee that they will remain so for several years, unless they receive the surgical attention, which they require. The absurdity of the present methods in vogue is amply illustrated by this one argument. The Government requires the raw recruit to have a good set of teeth because the Government realizes that exposed sensitive dentin, toothache, and the loss of teeth result in a soldier of depreciated vitality, a cog in the great army machine is defective, and in this the Government is wise. But the Government does not recognize the fact that the teeth of the recruit is [sic] just as liable to deterioration after enlistment as they were before, and that this deterioration will result in a defective cog in the mechanism of the machine just as certainly as if it had occurred before the recruit was accepted. And in this the Government is not wise. Quod erat demonstrandum which, freely translated means, that is what we told you in the first place. 10(pp812-813)

The 1898 National Dental Association Meeting

The second annual meeting of the NDA in Omaha, Nebraska, addressed the situation in August 1898, when Charles Butler offered resolutions approving the appointment of dentists to the Army and recommending the creation of an association committee to press the issue. Clark Goddard reported that a dental surgeon and two assistants (William Ware, George Ames, and John Gibbon) had already been appointed in Merritt's Corps in California and were about to deploy to the Philippines. After a discussion, the resolutions were referred to the executive committee with instructions to report on the matter before the meeting adjourned.¹¹

The NDA executive committee decided that a new committee should have "full control" of the subject of legislation for the employment of dental surgeons in

the Army and Navy and offered a resolution discouraging any "independent action" of state and local societies without the approval of the committee. Close coordination within the NDA was essential to focus its efforts. The association members approved the resolution. Doctors Finley, Donnally, and Butler were appointed as the new Committee on the Appointment of Dentists to the Army and Navy (renamed the Committee on Army and Navy Dental Legislation in 1899 and before World War I merged into the Committee on Legislation). They were instructed to report on the matter at the next annual meeting. This decision began the NDA's most pronounced period of active lobbying of Congress and the War and Navy departments. During this time, the NDA strongly encouraged dental legislation that would introduce dentists into the Army and Navy with commissioned status that would provide full recognition of their equality with the services' medical officers. Finley and Donnally remained in the forefront of this struggle for years to come.

The Hull Bill of 1898

On December 7, 1898, Iowa Representative John Hull, the chairman of the House Committee on Military Affairs, introduced a bill (HR 11022) "for the reorganization of the Army of the United States, and for other purposes." The bill was referred to the Committee on Military Affairs. On December 20, 10 days after the formal signing of the Treaty of Paris with Spain that ended the war, the committee reported that "the Army, scattered as it is in remote places, furnishes no opportunity for the care of the teeth, and the only way this care can be exercised is for the Government to furnish the skilled dentists to perform the work." In January 1899, while HR 11022 worked its way through the committee, Jonathan Taft noted that the bill included "a new corps of educated dentists" to be selected by professional examination. In the committee of the House of the Ho

On January 30 the bill was debated and amended. The rank proposed for dentists was to correspond to the lowest grade of assistant surgeon and the pay and allowances totaled \$1,600 per year. The bill did not provide for dentists' promotion or increase in pay as it did for medical surgeons, but it did include an amendment by the House Military Affairs Committee to the Medical Department section for adding a specific number of dental surgeons to the Army as follows:

In line 10, section 11, after the word "lieutenant," insert the following: "One hundred dentists with rank, pay, and allowances of a first lieutenant, mounted, who shall be graduates of a dental college and shall pass satisfactory professional examination." ^{12(p1290)}

James Hay, a representative from Madison, Virginia, offered the following amendment:

On page 12, in line 13, after the word "professional," insert the words "competitive, and shall be not over 30 years of age." I desire to call the attention of the House to the fact that this is an entirely new feature incorporated in the Army bill. It provides for a corps of 100 dentists, with the rank of first lieutenant. It does not provide for any age limit whatever. It does not provide for any competitive examination, as has been heretofore provided for surgeons in the Army.

I think in the interest of the service that these dentists ought not to be over 30 years of age. Otherwise you may put in men of 60 years of age. You want men just from college, men who have a college education, men who have some knowledge of dentistry and who can stand a competitive as well as a professional examination, and not a lot of old men with a political pull. ^{12(p1290)}

Nicholas Cox, a representative from Franklin, Tennessee, submitted a proposition to strike out the entire section providing for the dental surgeons and remarked:

There has never been a corps of this kind in the Army at all, and I want to put myself on record as having been opposed to it in the committee as I am opposed to it here. It does seem to me that we are going absolutely wild about this matter. I can not see any reason for putting 100 lieutenants in the Army as dentists. ^{12(p1290)}

Representative Hay then offered to change the age limit from 30 to 35, but Cox again moved to strike out the entire section. The Hay amendment was rejected by a vote of 73 to 34, and ultimately the entire dental amendment failed. ^{12(p1290)}

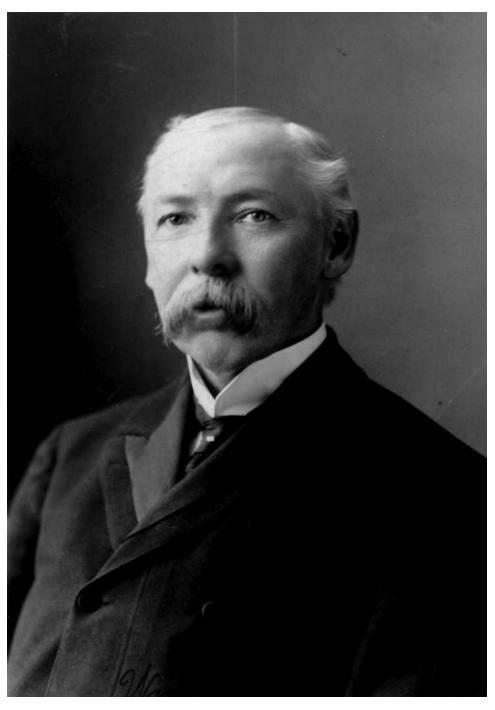
The Hull bill had originally provided for 500 medical officers for a 100,000-person army, and the committee amendment for 100 dentists was made up on the same basis. When the medical part of the bill came up for discussion in the House in January, the political climate forced the Military Affairs Committee to ask the House to amend every section of the bill. The committee reduced the number of medical officers from 500 to 235 and probably would have reduced the dentists to about 60. Cox, however, led the minority fight in getting the dental amendment totally rejected. Surgeon General George Sternberg continued to withhold support for the bill. ¹⁵

While the committees discussed the bill, the NDA's Committee for the Appointment of Dental Surgeons to the Army and Navy, with Williams Donnally as chairman, had prepared the following substitute for the clause in Hull's bill pertaining to the appointment of Army dental surgeons:

One dental surgeon with rank of colonel, one dental surgeon with rank of lieutenant-colonel, two dental surgeons with rank of major, sixteen dental surgeons with the rank of captain mounted, and seventy-three dental surgeons with the rank of first lieutenant mounted, with right of promotion in the grades named under the rules applicable to the corresponding grades of surgeons and assistant surgeons, all of whom shall be graduates of medical or dental colleges and shall pass a satisfactory professional examination. Provided that dental surgeons appointed as here provided may be transferred to the grade of assistant surgeon by complying with the examination requirements of that grade; and provided further that for all vacancies otherwise occurring in the number of dental surgeons herein provided for there shall be appointed a corresponding number of assistant surgeons, who shall first pass satisfactorily both the examination requirements of that grade and an examination in the special subjects of dental and oral surgery. ^{16(p188)}

Surgeon General Sternberg replied to Donnally:

I would say that I do not approve of your proposition with reference to dental surgeons. As I have already said to you, I have not been an advocate of the proposition to add to the Medical Corps of the Army the one hundred dentists provided for in



Williams Donnally, chairman of the National Dental Association's Committee for the Appointment of Dental Surgeons to the Army and Navy. Photograph: Courtesy of the American Dental Association.

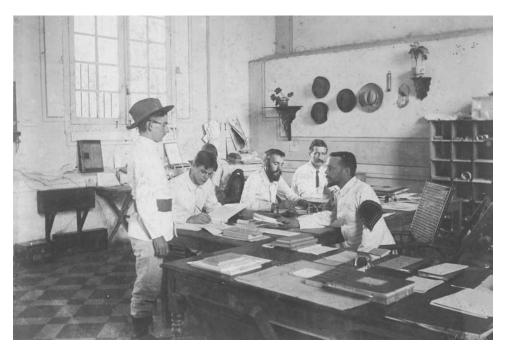
the Hull Bill. Moreover, an Army medical officer must serve for five years before he has the rank of Captain; he rarely attains the rank of Major in less than from fifteen to twenty years, the rank of Lieut. Colonel after thirty to thirty-five years service and many of our medical officers have been retired at the age of sixty-four without reaching the rank of Colonel. ^{3(p71)}

Sternberg also sent a copy of this letter to Hull, the chairman of the House Committee on Military Affairs.³

B Holly Smith

By early 1899 approximately 20,000 US troops were in the Philippines, where open fighting was already taking place, but William Ware and George Ames in the Manila area were the only soldiers who could provide affordable dental care (at the time, there was one civilian American dentist in the city, but his rates were high; his charge for the smallest amalgam filling was \$10).¹⁷

The lack of dental care for the soldiers was widely known within the national, state, and local American dental societies, many of which urged their national associations to remedy this situation once and for all. On February 7, 1899, LC Moore of the Detroit Dental Society sent William Walker, president of the Southern Dental Association (now a branch of the NDA) a copy of his society's resolution recom-



Stewards and clerks in hospital steward's office, Second Reserve Hospital, Manila, Philippine Islands, circa 1898. Photograph: Courtesy of the US Army Medical Department Museum. Spawar-033.

mending the appointment of dentists to the US Army and Navy. The Southern Dental Association was scheduled to meet in New Orleans within several days and Moore urged Walker to bring the matter up before his association at the "earliest opportunity" because it was "a matter of importance to the profession." Moore believed that if any action from Congress were ever to be expected, dentists had to lobby their congressmen.¹⁸

At the same meeting, B Holly Smith, an 1881 graduate of the Baltimore College of Dental Surgery and now a member of the Southern Dental Association's Committee on Dentists in the Army and Navy, 19 reported that the committee chairman, John Chapple, had failed to call the committee together or to organize any work during the past year because "he did not think the time propitious for work in this direction; that at a more opportune period he would open negotiations with the powers that be." 19 Smith said that undoubtedly Chapple had "overlooked the great importance of the matter." He urged the society's members to use their personal influence with their congressmen and "beg them to look into the way in which our citizen-soldiers are being neglected." Smith told members "much could be accomplished. The time is right now. Strike while the iron is hot." He assured his listeners that Surgeon General Sternberg, who was a personal friend, thought that there was "no chance" for passage of a dental bill, because all the money was already appropriated for other purposes. 15

Smith's comments resulted in a round of discussion. Henry JB McKellops, Mexican War veteran and author of the first resolution seeking dentists in the Army, commented that dental surgeon candidates should be trained in both medicine and dentistry. HW Morgan discussed Williams Donnally's work on the NDA's committee, reiterating Donnally's position that every dentist had to appeal to his congressmen. James Crawford contrasted the lack of dentistry for the soldiers at Camp Chickamauga to the care the horses received from the veterinary surgeons:

Any man who went through one of our military camps, and who saw what I saw at Chickamauga, will have an argument that no man can resist. . . . I saw enough then to convince any one who has enough sense to be a Congressman or a ward politician that it is the duty of the Government of the United States to appoint dental surgeons to the army and navy. . . . There is a very small percentage of horses in the army compared with the number of men, and yet they have veterinary surgeons. ¹⁵

Following the Southern Dental Association meeting in New Orleans, the subject of military dentists became a centerpiece in professional dental journals. The editor of the *Texas Dental Journal*, Dr Josiah Fife, expressed his regrets that so "little effort" had been made, and recommended that such "important a matter" deserved the attention of the entire profession.²⁰

In July 1899 Wilbur Litch, editor of *Dental Brief*, wrote in favor of the Hull bill (or any similar measure) that would secure the appointment of dental surgeons for the Army and Navy. He believed that:

... such service, if once properly established, would soon convince the most skeptical of its vast value and importance to the welfare of our soldiers and sailors. If the examinations for appointment are made relatively as severe as those for the present

army and navy medical corps, an exceptionally well qualified body of men can be secured, provided, of course, that such inducements as to rank, pay and promotion are offered as they can accept with due regard to their personal and professional dignity; but upon these vital points there must be no compromise and no surrender.^{21(pp406–407)}

That same month, Dr LW Sibley of Rochester, New York, supported the need for Army dentists when he observed in *Dental Cosmos*:

At present the Government makes no provision for dental services other than the extraction of teeth. This operation, I am told, is usually performed by the hospital steward, who numbers among his other accomplishments the washing of bottles, doing up of medicines, etc. If the reports of our soldiers returning from Cuba are to be credited, life in the trenches dodging Mauser bullets is a glorious crimson sunset compared to a few minutes with this amateur dentist. ^{22(p687)}

By way of contrast, he noted: "We are granting to the inmates of some of our prisons the services of a dental surgeon at the expense of the state, and are withholding them from our boys who are to-day fighting under a tropical sun for the honor and dignity of our flag."²²

In 1898–1899, JJ Ginsti of San Francisco, California, was sent to Manila at the invitation of General Merritt and with Surgeon General Sternberg's approval. Before leaving in July 1899, he examined about 160 soldiers and found that over 80% of them needed dental work. "I went to Manila in the hope of making a report that would induce Congress to act in this matter. . . . Any information or help I



Horse–drawn ambulance, two corpsman standing nearby, Camp Chickamauga, Ga, 1898. Photograph: Courtesy of US Army Medical Department Museum. Spawar-059.

can give you in that matter I am only too happy to supply, as I consider it one of the most important matters demanding attention in the United States Army at present."^{23(p154)}

Dentistry's Dissenting Opinions, 1899

Despite the new sense of urgency, not all dentists agreed on the need for dental surgeons in the Army. William Stark of Kansas City, Missouri, a former major in the 5th Regiment, Missouri Infantry, suggested that the main reason for creating the corps was to provide an opportunity for recent dental graduates to secure "remunerative employment" at government expense. He also felt that if the services wanted dental surgeons they would request them of their own accord; forcing dentistry on them seemed to him like "soliciting" (he recommended that the dentists wear a "rampant" forceps as a collar ornament on their uniform blouse). Furthermore, he stated that the Army already looked upon the Medical Department as a "very necessary evil," and that a dentist would be considered an "unmitigated evil." From "personal experience," he concluded that there would not be enough dental disease to warrant anything besides extractions, the forceps being the "panacea" for the majority of cases. He recommended that dentists enlist as hospital stewards if they wanted an Army career.^{24,25}

The editor of the Western Dental Journal, Dr John Patterson, wrote that the effort to secure a dental corps was a "useless fight," and that even if dentists were accepted into the Army, "it would not be to the advantage of the dental profession."²⁶

In November 1899, at the meeting of the Central Dental Association of Northern New Jersey held in Newark, William Fish, a member of the NDA's Committee for Dentists in the Army and a civilian dentist from Newark, voiced his opposition to the NDA's support of the congressional bill to appoint 100 contract dentists to the Army. He favored a dental corps composed of a lieutenant colonel and a major (purely executive), and one captain and two lieutenants for each of the Army's 15 or 16 geographical departments. He said that to make the corps "effective," its members should be commissioned officers. He argued that it was a recognized fact that Army privates respected only officers: "They respect purely the shoulder straps, nothing more." Craig Work of Ottumwa, Iowa, who had practiced dentistry in the Army as a private, agreed that soldiers would not have as much respect for the dental surgeon if he was not a "commissioned rank officer."

In the *International Dental Journal* that same year, Dr Benjamin Catching of Atlanta admitted that he feared England would have dental surgeons in its army before the United States, yet he agreed that only those with the proper credentials should be chosen, supporting the idea that candidates should have both dental surgery and medical degrees to be eligible for appointment.²⁹

The 1899 National Dental Association Meeting

At the annual meeting of the NDA on August 1, 1899, in Niagara Falls, New York, Mark Finley of Washington, DC, read the report of the Committee on the Appointment of Dentists to the Army and Navy. In general, the committee members

felt that rather than place the dental profession in an "inferior" position to that of the medical profession, it would be better if no congressional legislation were enacted. The committee felt that this distinction would also extend to the status of the civilian profession. Members believed that those who had entered the Hospital Corps in order to serve as dentists were "detrimental to the attainment" of the objective sought, namely a commissioned dental corps equal in rank to the Medical Corps. The committee concluded that without the support of the surgeon general it was unlikely that any legislation would ever be enacted.¹⁵

On Donnally's motion, the report was referred to the Committee on the President's Address. This committee did not entirely agree that the association should "work for status only," recommending that the association concentrate on getting dentists into the Army and Navy and then on achieving appropriate status. ^{15,30}

Despite his favorable view of the Hull bill, in September 1899, Theodore Chupein (1830–1901), a Confederate veteran and the editor of *Dental Office and Laboratory*, worried that 1,000 patients per dental surgeon would be too much for one dentist to handle unless each patient had only a "trifling amount of work to be done." He also thought that the appointed dentists should be selected on their own "professional merits," and not by "political recommendation."³¹

Doctors Fish and Holbrook at Fort Wadsworth

On November 17, 1899, William Fish and Charles WF Holbrook, both civilian dentists from Newark, New Jersey, got permission from the commander of Fort Wadsworth, New York, to conduct a dental examination of the garrison's enlisted personnel. Their examination of 50 soldiers added more justification for a military dental service. They reported that:

Eleven men had what might be called a perfect set of dentures; of these eleven five were new recruits; the balance had been in the service from one to five years. We therefore found 39 men out of 50 in absolute need of dental services. Nine of the thirty-nine men were practically raw recruits, who are supposed to have a perfect set of dentures on entering the service. We found from a very superficial examination the presence of 144 cavities that needed immediate attention; how many more there were that escaped our view no one knows. In many cases where caries existed, the pulps were exposed, and the men complained of toothache to a greater or less degree. Forty teeth had been extracted while in the service. When we take into consideration the present conditions, it is safe to assume that over 50 teeth will have to be removed from those mouths in the next year.^{27(p68)}

They also noted that in some instances men had to be relieved while on guard duty because of a toothache; some saying they "needed a dentist more than a doctor."²⁷

The Second Otey Bill, 1899

On December 5, 1899, Representative Peter Otey made another attempt in the House of Representatives for Army dental legislation at the 56th Congress. His new bill (HR 972) provided for the appointment of "dental surgeons for service

in the United States Army." It was referred to the House Committee on Military Affairs and ordered to be printed. 32,33

The bill provided authorization for the surgeon general to appoint one contract dental surgeon for every thousand soldiers rather than establish a commissioned dental corps. Those appointed had to be medical or dental college graduates of good character and would have to pass a professional examination. The examination would be conducted and supervised by the first three dental surgeons appointed, who would be selected for their qualifications and compensated an extra \$60 a month. Dental college graduates currently serving and satisfactorily performing dental duties could be appointed without examination.³⁴

Unlike the Hull bill, Otey's bill proposed that dentists be appointed on a contract basis, under the terms and conditions applicable to Army contract surgeons. Some in the dental profession thought that the position of contract surgeon lacked military dignity and would not command respect. Others argued that the basis of the appointment of dentists in the Army was humanitarian, meant to relieve the sufferings endured by military personnel because of their inability to secure needed dental services; therefore, dentists should be content with the contract basis because rank in the service would not affect the humanitarian character of the work. Also, this plan would be an opportunity for the Army to evaluate the impact of dental surgeons, who would prove valuable and necessary. As a result, better things might come, including the dignity of rank. The Hull bill had aimed higher and lost; the Otey bill's less ambitious approach gave it a good chance of passing. Dentists were urged to write their congressmen in support of the bill. Williams Donnally recommended that they omit "any reflection or even mention of the position" of the surgeon general or War Department in their correspondence.³⁵

The Response of the Dental Press in 1900

In January 1900 the editor of *Items of Interest*, Rodrigues Ottolengui, commented on the NDA committee's efforts:

It will undoubtedly be a disappointment to many who read the bill to note that all that is asked is that contract dentists be authorized, the original and natural desire of our profession being to see dentists established as officers, similarly with the medical corps. The Committee, however, have arduously worked in this cause and are cognizant of so many obstacles in the path of a regular commissioned corps of dentists that they have finally and wisely decided to attempt only that which would not be certain to fail. The defeat of another dental measure would relegate the cause to oblivion for many years, whereas the adoption of the Committee's bill would at least mean the practical trial of the project, with the very possible result that as soon as the usefulness of dentists to the army had been fully felt, much of the present objection would subside and a commissioned dental corps would be more readily attained than now. In such a condition of affairs preference in the appointments would surely be given to those who had well acquitted themselves as contract dentists and who would by then have become familiar with the needs of the soldiers.^{33(pp77-78)}

He also urged that all dentists write their congressmen.³³

In January 1900 *Dental Headlight* stated that it was "the duty of every dentist, both for the love of humanity and his profession, to lend a helping hand." The editor also remarked, "in conversation with a member of the First Tennessee Regiment, recently returned from the Philippines, we learned how badly a dentist was needed, and of the suffering among the soldiers for lack of proper dental treatment." ³⁶

Also that month, *Dental Digest* commented on the fact that there was both support of and opposition to the proposed dental legislation among the Army surgeons. It quoted the *Brooklyn Eagle* of January 16, which had said that "a prominent army surgeon" was opposed to the idea, claiming, "he thinks that if this bill passes, the government should add tooth-brushes and tooth-powder to the rations. He further says that besides the first cost army dentists would entail on the government there would have to be another outlay for materials." The surgeon reminded readers that Army recruits were not accepted unless their teeth were in good condition and they typically served only 3 years, surely their teeth could not "deteriorate very much in that time." *Dental Digest* thought this statement "so ridiculous" that it did not deserve a reply, and attributed all the opposition to the proposed bill to the "jealousy of army physicians."³⁷

On the other hand, *Dental Digest* pointed out that some Army surgeons were strongly in favor of dental legislation. FC Stanton of Chicago, a surgeon in the Illinois state militia and a former acting assistant surgeon, US Army, not only approved of it but also wrote to Otey, commending his efforts. Stanton said:

This is a matter the importance of which has been gravely underestimated up to the present time. As a surgeon in the volunteer service, I am aware of the frequency with which the services of a dental surgeon are required, and I shall be happy to do anything in my power to further the passage of the bill.^{37(p67)}

On the whole, the majority of Army officers, surgeons included, were in favor of the addition of a dental corps to the Medical Department. Most Army officers criticized the bill only because it did not carry rank for the dentists; the objection to giving dental surgeons rank came mainly from members of the medical profession who were not connected with the Army.³⁸

The lack of rank was William Fish's main objection to the current Otey bill; he still believed that dentists must be commissioned officers. He added that the association hoped for the appointment of 100 contract dentists. He stuck by his opinion that there should be a lieutenant colonel and a major to handle executive duties and one captain and two lieutenants for each of the Army departments.²⁷

In January 1900 the editor of *Dental Cosmos*, Edward Kirk, endorsed the Otey bill while recognizing that the proposed contract status had been criticized in some quarters as "one lacking in military dignity" and "respect." He reminded those taking this view that the main argument for dental surgeons was the "humanitarian motive" and, therefore, rank should not be the important factor for the dental profession's support of the bill. He also pointed out that the Hull bill had aimed higher and had failed as a result. In his view, the Otey bill would be an "entering wedge," after which rank would follow.³⁹

The Otey Bill Moves Forward

On January 16, 1900, Surgeon General Sternberg finally endorsed the Otey bill as follows:

Respectfully returned to the Honorable, the Secretary of War, recommending approval of the bill. The large number of troops in the Philippines, and else where, where the services of competent dentists cannot be secured, makes it desirable that the government should make a reasonable provision for emergency dental work required by officers and enlisted men of the army.^{40(p166)}

Sternberg's endorsement, which the secretary of war sent to the Military Affairs Committee, was crucial to the eventual passage of the bill. Now that the Army Medical Department was behind it, it seemed only a matter of time before the bill would become a reality. Sternberg's assent was at least partially the result of the persistent work of Williams Donnally and the NDA Committee on Army and Navy Dental Legislation, which had reached an understanding with Sternberg that the dental surgeons would initially be similar to contract surgeons and later be eligible for commissioned status.^{28,41,42} At the 1901 NDA meeting, the committee report confirmed this accommodation:

There was a distinct understanding with the Surgeon-General that his approval of the terms of the bill was made with the intention of recommending, as soon as authority was granted for the commissioning of Contract Surgeons, that authority would be granted for the commissioning of Contract Dental Surgeons in such numbers as experience in the meantime would warrant. . . . Thus the transition of the corps from the contract to the commissioned status, under restrictions as are suitable to protect the interests of the government and the honor of the profession, was provided in advance. 41(p218)

On February 28, 1900, the Committee on Military Affairs recommended that the Otey bill (HR 972) be passed with a few minor amendments.^{32,43} Representative Hay's report gave the reasons for the committee's approval:

The necessity for dental surgeons in the Army has been made manifest since the beginning of the Spanish war, and in the light of more recent army service in the Philippine Islands this necessity has been emphasized, and some effective action is believed to be mandatory to accomplish this much-needed end.

The testimony of army officers of the line, of army surgeons, and the cordial approval of this bill by Surgeon-General Sternberg would be sufficient alone to induce your committee to favorably report the measure, to say nothing of the demands for its passage in the interest of humanity and the health of our soldiers.

But from almost every State in the Union come to Congress appeals, not from dentists, but from medical men of the highest standing, men of national reputation, expressing their opinion that the measure is one necessary not only for the health of the soldier, but necessary for his efficiency. We would call attention to the fact that Dr. [Nicholas] Senn, of Chicago, a surgeon of world-wide reputation, indorses the

measure. Dr. [Thomas Sargent] Latimer, of Baltimore, of national fame in his profession, heartily approves it. Nearly all members of Congress advocate its passage. . . .

We do not deem it necessary to reproduce in this report the letters of army surgeons, both of the Regular and Volunteer Army; of the distinguished medical men in civil life; of eminent civil officers, and of members of the Senate and House of Representatives. Suffice it to say that all cordially indorsed the proposition of adding dental surgeons to the Army, and in this they were supported by the *New York Herald, Nashville American, Memphis Appeal*, as well as many journals throughout the country.

Your committee believing that the enactment of this bill into a law will increase the efficiency of the Army and add to the comfort of and retard disease among its rank and file, unanimously recommend its speedy passage.⁴³

Also in February, the editor of *Dental Review*, Alison Harlan, reported that the occupation troops in Cuba were "enthusiastic" about having dental surgeons appointed in the Army to treat their dental diseases. Their slender pay made it virtually impossible for them to employ a local dentist. Therefore, they had no recourse but to have their teeth "dug out in the most crude and barbarous way by the regimental surgeon, or more often some amateur butcher," neither of whom had the expertise nor proper instruments for the operation. Frequently, the pa-



A ward in General Hospital, Santiago de Cuba, 1899. Photograph: Courtesy of US Army Medical Department Museum. Spawar-002.

tients wound up in the hospital for postoperative care as a result of the "lack of competent dental services." ⁴⁴

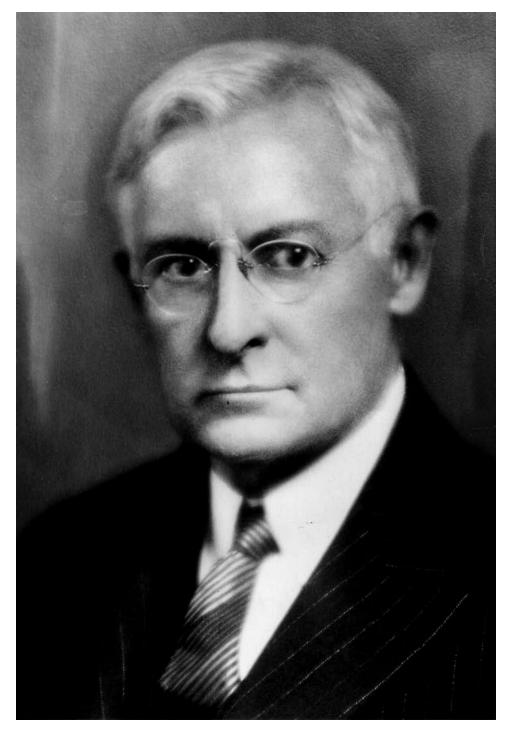
That same month, James Truman and George Warren, editors of the *International Dental Journal*, agreed that rank was "not of material importance." They also felt that the position of the three supervising dental surgeons was the "weak portion" of the bill. They surmised that it would be difficult to get three competent dentists to serve for the extra \$60 a month, and argued that gold, "if used at all," should be reserved for officers, who should pay for the material. Finally, they said that one dentist could not possibly care for a thousand patients; at the rate of seeing six to eight a day, it would take 6 months to see each member of the regiment once.⁴⁵

In March 1900, however, Rodrigues Ottolengui wrote that the prospects were "fair" for congressional approval of the Otey bill. About 200 votes had been pledged in its support in Congress. Some encouragement also came from newspaper reports that Brigadier General Elwell Otis, the Philippines commander, had notified the government that his men were "suffering with their teeth," and that he had requested that dentists should be sent to him. These reports proved to be false, but the Army Medical Department was not as opposed to the dental bill as it had been in the previous year, and Ottolengui thought that the surgeons would pose no obstacle. 46

Also in March, the majority of Army officers were in favor of the Otey bill, according to Dr Harry Wilson of Chicago. Their only criticism was that it did not carry rank, yet most of this criticism came from the civilian medical profession, not the Army. Wilson took exception to those who said that Surgeon General Sternberg "killed" the Otey bill, whereas he had actually endorsed it in writing to the House Committee on Military Affairs. In its closing, the committee said that passing the bill would "increase the efficiency of the army and add to the comfort of and retard disease" among soldiers. Committee members unanimously recommended its passage.³⁸

In April, Ottolengui reported the Otey bill's favorable treatment by the Military Affairs Committee. He also stated that the bill as originally written stipulated that the Army dentist candidates be "graduates of standard medical or dental colleges." The committee amended the bill so that it read "graduates of standard dental colleges" only; Ottolengui thought that the "significance" of this change would be "apparent" and "appreciated" by the dental profession.⁴⁷

That same month, the editor of *Dental Brief*, Wilbur Litch, endorsed the recommendations of Williams Donnally and Robert Oliver of Indianapolis for appointment to the supervising board positions. He stated that Donnally was "a gentleman" who was held in the "highest esteem both personally and professionally by his confreres" in Washington, and had shown "high ability as an organizer" in the effort to secure the passage of the Otey bill. Oliver, he noted, was an oral surgeon, president of the Indiana State Board of Dental Examiners, a faculty member of the Department of Dental Surgery of the University of Indianapolis, Spanish-American War veteran, and known for his "executive ability and powers of organization." The following month, Litch endorsed the recommendation of John Sayre Marshall, citing him as "one of the leading teachers of Oral Surgery and Dental



Rodrigues Ottolengui, editor of Items of Interest. Photograph: Courtesy of the American Dental Association.

Pathology." He noted that Marshall's book, *Injuries and Surgical Diseases of the Face, Mouth and Jaws*, was the standard textbook in nearly all the dental colleges in the United States and Canada, and had even been translated into German.⁴⁸

Dental Office and Laboratory also commented on the new bill:

A bill for the appointment of dentists to the army was introduced in the last Congress, but failed of passage. The National Dental Association, at its last meeting, appointed a committee who very wisely decided that, in view of the opposition to the project, only the appointment of contract dental surgeons be asked for and not a regularly commissioned dental corps. There is no question of the need of dental surgeons in the army and navy but it is much better to get an entering wedge in this manner than to have the matter again defeated and regulated to the back-ground again for many years as it most surely would be.^{34(p91)}

Like many others, the journal urged its readers to write to their congressmen to support the measure.³⁴

Also the same month, Dr George Edwin Hunt, the editor of the *Indiana Dental Journal*, added the following remarks in support of the Oliver endorsement:

Dr. Oliver is peculiarly well qualified by temperament and training to perform the duties attaching to this office. He has powers of organization, executive ability, energy, and brains. His previous military training, while not a necessity, would be an advantage. He has had experience both as a teacher and an examiner, and has acquitted himself with credit and honor in both positions.⁴⁹(p535)

The Otey Bill Stalls

On April 6, 1900, Senator Edmund Pettus of Alabama introduced a companion Senate bill (S 4044) to Otey's House bill to provide for "the appointment of dental surgeons for service in the United States Army." The bill was read twice and referred to the Senate Committee on Military Affairs. On May 17, Pettus, a member of the committee, proposed an amendment, and on June 5, he reintroduced the bill with the amendment recommended by the Military Affairs Committee that limited the number of dentists in the Army to a maximum of 30. The Senate agreed on the amendment, and the bill was read the third time and passed. The next day, the Senate referred the bill to the House Committee on Military Affairs. The Senate then adjourned without taking further action.³²

At the July 1900 meeting of the NDA at Old Point Comfort, Virginia, B Holly Smith, now the NDA president, commented on the delay of the Otey bill's passage. If the bill reappeared, he recommended Williams Donnally, John Sayre Marshall, and Vines Turner (of Raleigh, North Carolina) be appointed as examining surgeons. He urged the association's Committee on Army and Navy Dental Legislation to continue its efforts to secure passage of the bill. The committee (consisting of Mark F Finley, Charles S Butler, and Williams Donnally) predicted that with the "favor" the measure had already won this session, Congress would pass the dental bill before the close of the next session. The committee was increased to five members and appropriated a maximum of \$250 for its work during the coming year. 50–52

The case of Private Walter Fitzgerald illustrated the continued dental condition of the troops serving in the Philippines in 1900 as Congress and dental associations debated the merits and shortcomings of the Otey Bill. The 23-year-old soldier was one of the first volunteers to reach Manila after Admiral George Dewey's victory in Manila Bay, and had been in the Philippines for 19 months. During his time overseas, Fitzgerald had lost nearly every tooth in his mouth. Tropical fever and the Army diet had affected his gums and caused his teeth to loosen and drop out one by one.⁵³ Despite many stories like this and more than 2 years of debate and lobbying, as 1900 drew to a close, Congress still had not passed any dental legislation authorizing dental care in the US Army.

The Army Reorganization Bill and the Otey Amendment

The transfer of the Philippines to United States control at the end of the Spanish-American War led to prolonged conflict. A Filipino independence movement, focused on gaining complete sovereignty for the Archipelago, lasted from early 1899 until mid 1902. The confrontation required an unprecedented number of troops, many of whom were federal volunteers who faced expiration of their enlistments early in 1901 despite the continued violence. Mustering out was due to commence in January, but troops could not be withdrawn from at least 400 stations in the Philippines without endangering the safety of those remaining.⁵⁴

As a result of the dangerous situation in the Philippines, a sense of urgency suddenly pervaded Congress on December 3, 1900, when Representative John Hull introduced a bill (HR 12224) for Army reorganization. The Committee on Military Affairs quickly reviewed the bill and a companion Senate bill (\$\square\$4300) before referring it to the floor for discussion. On December 6 the Medical Department section (Section 18) of the Senate bill came up for debate in the House. Hull, who had unsuccessfully pushed an Army dental bill in the final session of 1899, presented a letter from Surgeon General Sternberg to the secretary of war lamenting the shortage of medical officers in the Philippines and the inadequacies of the contract surgeons on duty there. Sternberg recommended that 50 of the volunteer surgeons already on duty in the Philippines be commissioned with the rank and pay of major, and 150 of the volunteer assistant surgeons be commissioned with the rank and pay of captain, each for a period of 2 years. It would be much less expensive to the government to retain these officers, who could be mustered out when the emergency was over, than to increase the Medical Corps by adding new permanent officers. James Hay, a representative from Virginia, proposed that this plan be added to Section 18 as an amendment, and the House agreed.⁵⁴

Representative Otey promptly offered an adjustment to the previous amendment of Section 18, which repeated his proposal that a maximum of 30 contract dental surgeons be employed, with a ratio of one for every 1,000 troops. These surgeons, he argued, should be dental college graduates of good moral standing selected by a board of three specially-appointed dentists. The board was to be made up of dentists recommended by the surgeon general and approved by the secretary of war. Dental college graduates currently serving as enlisted soldiers and being used satisfactorily as dentists could be appointed without examination.⁵⁴ Otey clarified:

Mr. Chairman, this amendment is the bill which was reported unanimously by the Senate committee, the same bill having been reported by the House committee unanimously on two occasions except that the House bill provided for 1 dentist for every 1,000 men. The Senate changed that to 1 dentist for every 1,000, men but not to exceed 30 in all. I believe every member of this House has been interviewed on this subject, and I have yet to find a single one who has openly opposed it. I have a list of a few of them here which I will give.⁵⁴

Otey listed 50 congressmen, 80 Army officers, and 5 state governors who endorsed the dental amendment before his time on the floor expired. When he had finished, Representative James Slayden of Texas asked, "has the gentleman no way of demonstrating the qualifications of dentists and the necessity for their services without reading the roll of all the public officials in the country?"⁵⁴

Otey did not answer the question but continued:

Now, Mr. Chairman, I do not thrust myself upon the House very often. When I do, I have something to say that is tangible and worth talking about [laughter]. I do not know to what the gentleman from Texas [Slayden] has referred. He reminds me of the Irishman of whom I heard a story. He was eating eggs. The first one he swallowed went down all right; but in swallowing another he heard the sound of a chick as it went down his throat; and then he exclaimed, "Begorrah, you have a swathe voice, but you spake too late [laughter]." I think, sir, that anybody who opposes this bill "spakes" too late. I want gentlemen to come out now and say whether they are going to take care of 3,200,000 teeth, half of which are aching all the time [laughter]. I appeal to gentlemen on this side of the House and on the other side of the House, regardless of recent elections and regardless of political affiliations, to come forward and give the old soldier (that grand old soldier) a chance to get rid of the toothache.

I do not care to occupy further time. I ask for a vote on this question, and I hope every man will stand up or sit down [laughter]. $^{54(p98)}$

Hull suggested that the amendment was of such importance that perhaps it should be considered independently of the larger bill. Ultimately, that proved unnecessary and the dental amendment was finally agreed upon, the bill passing the House by a vote of 171 to 133 with all of the House amendments on December 6.⁵⁴

The following January, a *Dental Digest* editorial expressed regret that it was "necessary for dentists to start in the army under such conditions." However, those in high authority felt that if the Dental Corps proved its value, it would become a permanent corps and rank would follow. *Dental Digest* also questioned whether the better qualified, more experienced dentists would be attracted to a service career in view of the insecurity of a 3-year contract with no medical or pension benefits. Furthermore, the journal warned:

Any practitioner who goes into the service with the idea that it is easy will be sadly disappointed, as the work will be very hard, necessitating long hours, and will consist for the most part of extracting, treating and cleaning teeth, inserting amalgam and cement fillings, and perhaps making rubber plates. Some applicants for these positions seem to think they will have electric engines, fountain cuspidors, cabinets, carpets, up-to-date dental chairs, etc. However, the most of our soldiers at present

are chasing Filipinos and Boxers, and as the dentists will have to follow the soldiers, an adjustable head-rest or a portable dental chair will be all the office furniture that can be employed, except, of course, where army posts are situated in large cities. . . . From a humanitarian standpoint the bill is beneficial to the army, for even though two or three hundred dentists are needed, thirty will be able to accomplish a great deal. So far, however, as the dental profession is concerned, we regard the measure as an insult rather than an honor. Dentists seem to be viewed by legislators and army officials as on a par with horse doctors, for the appointees are not commissioned, are underpaid, and have little or no control of their own actions. If it were not for the fact that at the present time our soldier boys, who unfortunately can not have any say in this matter, are desperately in need of dental service, we should be glad to see the bill killed in the senate. 55(p65)

Army Dentists at Last

On January 3, 1901, the Senate began deliberation on the Army bill with the House amendments. On February 1 the bill was signed by the speaker of the House and the president pro tempore. The next day, the president approved and signed the act "to increase the efficiency of the permanent military establishment of the United States." The implementation of this new law was a historic event; a corps of military dental surgeons was officially made a part of the United States Army, a step no other army in the world had taken. Now dental treatment for the common soldier was seen as a government responsibility.⁵⁴

Although the humanitarian cause of dentistry had been served, the profession remained relegated to a second-class status in relation to its medical counterpart because of the lack of commissions for dentists and their status as civilian contract dental surgeons. But that distinction probably did not matter much to Dr Henry JB McKellops, who had first formally proposed the appointment of dentists to the US Army on July 21, 1858, and then fought for the cause for the next 4 decades, because he lived to see his goal achieved before he passed away in April 1901. His obituary in the June issue of *Dental Cosmos* noted, "It is gratifying to know that Dr. McKellops lived to see the accomplishment of his wise suggestion, even after the lapse of forty-two years."⁵⁶

The term "contract surgeon" dated back to the Mexican War, when the number of medical officers in the peacetime Regular Army was inadequate for the expanded wartime army. To meet the need, civilian surgeons were appointed to act in the capacity of regularly commissioned medical officers. These physicians served under contract as "quasi officers," and were referred to by courtesy as "acting assistant surgeon" and by discourtesy as "contract surgeon." During the Civil War, between 5,000 and 6,000 civilian physicians were appointed to the Army, and during the Spanish-American War and Philippine-American War, between 800 and 900 contract surgeons were appointed. In these three wars, the contract surgeons, although never mustered into the Army, wore the uniform and performed all the duties of commissioned medical officers. The contract surgeon's status differed in the following ways: his contract was subject to annulment at any time by the chief medical officer in charge of the department in which he served, with no right to trial or appeal; he was paid less and given fewer allowances than Regular Army assistant surgeons and

had no possibility of promotion; he had no sick or disabled pay or right to hospitalization in the Army system; he was not given a pension or retirement benefits unless he was injured in the service, and only then by congressional appropriation; he did not have the right to enter a soldiers' home; and he had no authority to issue orders to enlisted soldiers, even those in the Hospital Corps.^{57(pp742-743)} The first contract dental surgeons entered this system of quasimilitary status.

Some years later, John Marshall, who knew the circumstances intimately, explained why the status as contract dental surgeons was necessary at first:

Although the provisions of this bill were not satisfactory to the profession in general, particularly that section which provided that the dental surgeons should be "employed under contract," it was thought best to strive for its passage in this form rather than cause its defeat by insisting upon a commissioned status for the corps. The main idea at this time was to succeed in establishing a dental corps for the army, that the suffering of our soldiers from dental and oral diseases, at that period so prominently before the country, might be mitigated, and the profession of dentistry recognized as a needful adjunct to that of general medicine and surgery in maintaining the health and physical efficiency of our armies in the field.

Surgeon General George M. Sternberg was unwilling to recommend to the secretary of war the passage by congress of a bill giving a commissioned status to dental surgeons, as he felt sure that it would not at that time meet with the approval of the military committees of the senate and house of representatives, but he gave assurances that should this bill pass, and the work of the dental surgeons prove to be as beneficial to the services as it was hoped it would, congress would undoubtedly look favorably upon a bill granting commissioned status to the dental corps, and that he would use his best endeavors to secure the passage of such a measure.²⁸

The Dental Press: "Better Things in the Future"

The *Dental Review* said it did not desire to comment on the present act, hoping that it would "lead to better things in the future." *Dental Brief* pointed out that contract dental surgeons had "no real military rank," a major disappointment to those who had worked so hard for the dental bill.^{58,59}

However, the editor of *Dental Cosmos*, Edward Kirk, applauded the event: "The newly-elected dental corps, as pioneers in their field, will be expected to not only render efficient service, but by the fruits of their labors demonstrate to a large and not uncritical body of observers the rightfulness of the claims of dentistry to a national recognition of its importance in this new relation." Kirk credited the "growth of public appreciation" of dentistry as "one of the common necessities of life" for creating a demand for an Army dental service. The "national recognition" that dentistry received from the act and its significance in advancing the "professional status" of its members would be invaluable to the profession. Kirk concluded:

The present relation of the dental corps to the government service is that of contract surgeons, and, while the failure to secure the creation of a commissioned corps was cause for disappointment in the minds of many who were actively interested in the matter, there is in the present arrangement ample opportunity afforded for the dental

corps to demonstrate its efficiency, and its future development will determine its status in accordance with its merits. The medical department of the service is fully equipped and organized to the minutest detail, and the official attachment of the dental corps to the medical department is a provision not only natural and eminently wise, but, working as they do for similar ends, it places the dental corps at once upon a basis of the best working efficiency. It is a matter of interest that, while the dental surgeons are classified as "attached to the medical department," the dentist receives his orders from headquarters, not from the army surgeon. The work of each is clearly defined by the army regulations, so that one does not trespass upon the field of the other. It is provided that the dentist and surgeon shall consult upon cases of mutual interest, but under the same ethical professional rules as are maintained in these relations in civil professional life. 60-62

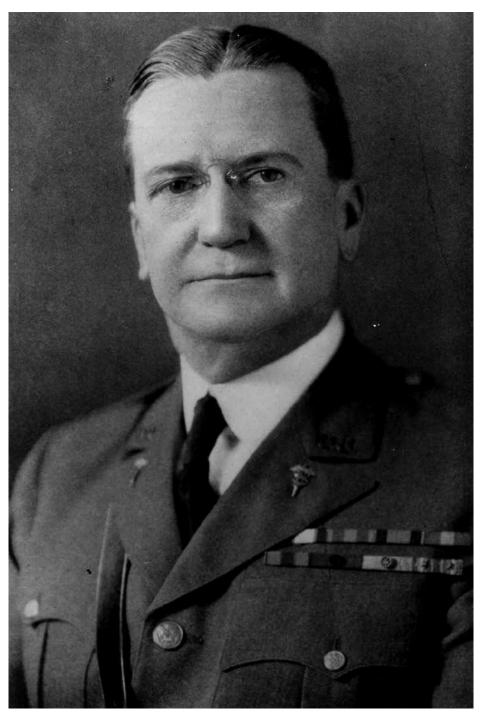
Foreign dental journals also chided their governments on being behind the times. The *Australian Journal of Dentistry*, for example, recommended that the commonwealth should "keep abreast with the times in the matter of provision of dental service" for its armies and follow the example of the US War Department.⁶³

The Dental Examining Board

As soon as the bill became law, the surgeon general named the first three contract dental surgeons who were to compose the dental examining board and serve as supervisory dental surgeons. John Sayre Marshall, the board's chairman, was a widely respected figure in dentistry. Also well known was Robert Oliver, who was a veteran of the recent war and prominent in Indiana dental circles. However, the third dentist elected to the committee, Robert Morgan, was virtually unknown. An enlisted veteran of the Civil War, Morgan graduated from the Baltimore College of Dental Surgery in 1881 and opened a practice in his native Lynchburg, Virginia. An Amorgan had drafted the successful versions of dental bill for Representative Otey, who strongly encouraged him to become one of the primary examining dentists. His appointment caused considerable controversy among civilian dentists, but Otey championed Morgan's appointment, saying, "the dentists in the country had not asked for the law. I had not thought of it. It was Dr. R.W. Morgan who suggested it. Then the dentists who had been asleep took it up and did good work to accomplish the results."

Some dental editors, including Kirk of *Dental Cosmos*, Clapp of *Dental Digest*, Litch of *Dental Brief*, and Ottolengui of *Items of Interest*, expressed their regrets that Williams Donnally was not appointed as a member of the examining board, because it was largely through his efforts that this legislation had been passed. Although Surgeon General Sternberg had recommended him, Donnally was not selected because the secretary of war argued that no one who had been "influential" in securing the necessary legislation should "personally profit by the law" (Morgan's role in the legislation was overlooked).^{59,60,77–79} This decision left Donnally with considerable ill-will toward Marshall, who was selected in his place, and later caused problems within the NDA.

Dr James Truman, editor of the *International Dental Journal*, commented on the board's composition:



Colonel Robert T Oliver, one of the first three contract dental surgeons chosen to serve on the dental examining board and as a supervisory dental surgeon.

Photograph: Courtesy of Colonel James M Vail.

The effort was made throughout the United States to present only the best representative men that could be found willing to accept the chief positions. It was naturally feared that it would be difficult to find that character of men willing to serve on the meager salary provided in the bill. It was well understood that whoever did elect to represent the dental profession in the army, it would be a great pecuniary sacrifice as well as comfort. It was, therefore, something of a surprise that a number of men known to be well qualified, offered their services, and the dentists of the country were not slow to appreciate the fact that this sacrifice was worthy of the men, and, recognizing this, they received cordial endorsement from all sections. It was supposed that the heads of the government appreciated the full measure of responsibility devolving on their selections, and in making these appointments only the highest good of the army would be taken into consideration.

The blow came when it was officially announced that three had been appointed. One man [Marshall] of the three required no endorsement. He was known everywhere as fully equal to all demands; some few knew another [Oliver] by name, but the other [Morgan] was by the writer entirely unknown. This latter appointment cannot be regarded complacently, as it is felt to be entirely at variance with the wishes of the entire dental fraternity that only men well known should fill these important positions. $^{80(pp391-392)}$

Although Truman expressed his satisfaction that Marshall was the board's president and "there is a confidence felt in his ability," he still felt that his selection did not "minimize the disappointment" and "dissipate the unpleasant feeling existing" over Morgan's appointment. He urged the NDA to protest against any future appointments made upon "mere political recommendation." The three men had "a serious responsibility" and would be held to "a strict accountability" by the dental profession. Furthermore, he predicted failure for the corps:

There is no desire to be a prophet of ill-omen in this connection, but it does seem to the writer that the non-success of this experiment is fully assured under present arrangements. The men selected, however able or earnest, cannot fulfill the duties required of them. When this is demonstrated and a demand is made in Congress for the repeal of the act creating contract dental surgeons, let the blame for the failure rest upon Congress, and not upon dentistry, or upon the men who so faithfully worked until the act creating dental surgeons in the army was finally passed. 80(pp393-394)

Despite his misgivings, he urged the profession's full support of the new service.81

The Work of the Dental Examining Board, February–July 1901

Marshall, Oliver, and Morgan began work on February 18, 1901, at 1814 G Street, NW, Washington, DC. The surgeon general instructed the board to plan the format for the examination of the first class of candidates to report the next week, on February 25.^{60,82}

In discussions with the examining board, Sternberg told them that many in Congress and the War Department saw contract dental surgeons as "an experiment," but he hoped that they would eventually become permanent and evolve into a commissioned corps. While the board had very carefully selected the best

possible dentists to begin the experiment, the surgeon general still reserved the right to select the candidates to be examined by the board. Despite criticism from some in the dental community, Sternberg supported the high standards that the board had set. Marshall believed that dentists would eventually become commissioned and therefore establish permanency in the Army. First, though, they had to prove that they were necessary to the "welfare and efficiency" of the Army. Marshall also thought that any effort to disturb the present status of the dental surgeons during the current session of Congress would be unwise; it was better to wait at least a year for the new dental surgeons to prove themselves. Oliver and Morgan agreed.⁸³

The candidates for contract dental surgeons had to be between 24 and 40 years old; graduates of standard medical or dental colleges, trained in all the branches of dentistry; of good moral and professional character (supported by testimonials from well-known professionals); able to pass a rigid physical examination equivalent to that given the candidates for commissioned officer status; and able to pass a thorough professional examination including both theoretical and practical examinations.⁸⁴

On February 25, 1901, the examination of the first eight candidates began. They were examined theoretically and practically in the following subjects and disciplines: anatomy, physiology, histology, physics, chemistry, metallurgy, dental anatomy and physiology, dental materia medica and therapeutics, dental pathology and bacteriology, orthodontics, oral surgery, and operative and prosthetic dentistry. An average score of 75% was required in each subject for the theoretical portion and 85% for the practical. Particular emphasis was placed upon the clinical component. The usual time allotted for the complete examination was 10 to 12 days, but the tests normally ran 2 weeks, with the theoretical followed by the practical. No travel allowances were provided by the government for the candidates' stay in Washington. 84–86

The candidates were given 2 hours for each subject in the written examinations, with the total written examinations lasting about a week. Elaborate equipment was placed at each candidate's disposal for the practical examination, which was described as follows:

The practical examination is a thorough test of the candidate as to his manipulative ability. In operative dentistry a patient is assigned to him, and he is required to make an examination of the mouth, recording upon a chart all conditions demanding treatment; and he is graded with reference to the accuracy of his diagnosis and its record. Then follows the removal of deposits; the preparation of cavities both by hand and engine instruments, with a grading upon his instrumentation and technique; the preparation and manipulation of filling-materials, and the insertion of gutta-percha, oxyphosphate, amalgam, and tin fillings; the treatment and filling of root-canals, and preparation of a root for a pivot crown. He is required to show proficiency, and is graded with reference to his ability in the application of the rubber dam, metallic separators, matrices, etc.; his diagnosis, prognosis, and treatment of oral diseases, and the care and sterilization of his instruments and hands. To complete the practical examination in operative dentistry necessitates work at the chair from 9 A.M. until 4 P.M. daily for at least three days, with an intermission of three-quarters of an hour daily for luncheon. In prosthetic work the candidate is examined as to his ability in

taking impressions of the mouth, making casts, taking the bite, and adjusting the articulation; the construction of a denture in vulcanite; making dies [sic] and counterdies from impression to completion; the construction of a swaged plate with metal and vulcanite attachments, and the construction of interdental splints. The swaged plate is to be made from a model of an edentulous jaw carved by the candidate to test his knowledge of the anatomical form of the jaw. The practical examination, including both operative and mechanical practice, consumes about one week, and the candidate is required to attain an average of eighty-five per cent on the total number of practical tests. $^{62(pp700-701)}$

As of March 16, only 2 of 14 candidates successfully passed the board: Seibert Boak (1876–1934) of Martinsburg, West Virginia, a graduate of the National University in Washington, DC; and Clarence Lauderdale (1873–1961) of Naples, New York, a graduate of the University of Buffalo in New York. Both men received appointments as contract dental surgeons and were ordered to report to San Francisco by April 15 to prepare for service in the Philippines.⁸⁵

In his report that day, Marshall expressed the board's general opinion of the candidates:

The board has been disappointed in the professional qualifications of most of the young men who have presented themselves. The examination does not cover any subjects which have not been taught in our best dental schools, and the board believes that the questions submitted have been of a practical nature and eminently fair. It is therefore to be hoped that our colleges will not recommend any young men to come before this board who are not thoroughly well qualified, theoretically and practically, in all of the branches comprising the curriculum of our leading dental schools. ^{85(p213)}

By July, seven other candidates had successfully passed the examinations for appointment: Franklin F Wing (1876–1942), Montana, Northwestern University Dental School; George L Mason (1871–?), Massachusetts, Boston Dental College; William H Ware (1864–?), California, University of California, Dental Department (who had served as an enlisted dentist in the Philippines in 1898–1899); Hugo C Rietz (1877–?), Wisconsin, Chicago College of Dental Surgery; Ralph W Waddell (1876–?), Ohio, University of Pennsylvania, Dental Department; Jean C Whinnery (1878–1910), Nebraska, University of Pennsylvania, Dental Department; and Frank H Wolven (1878–?), New Jersey, Columbian University Dental Department, Washington, DC.⁸⁷

In addition to those dentists selected by the board in Washington, the February 2 act authorized dental college graduates then serving as enlisted members of the Hospital Corps to be appointed as contract dental surgeons without examination, provided they had been detailed to dental duties for at least a year and had satisfactory performance reports from their commanding officers. Under this provision, five soldiers then serving in the Philippines were released from their enlistments and immediately enrolled as contract dental surgeons: Private Samuel Hussey (University of Michigan College of Dental Surgery, 1897); Private Emmett Craig; Private Alden Carpenter; Acting Hospital Steward Charles Petre; and Private Douglas Foster. After 5½ months of continuous service, the dental examining board finally filled its quota. The surgeon general had invited

86 applicants from various states and territories, 70 whom actually appeared to take the examination. The average age of those appointed was about 27 years (the age limit established by the surgeon general was between 24 and 40 years). In general, candidates who had received their dental degrees from 5 to 10 years before failed the theoretical examination, while the recent graduates failed the practical examination (Table 6-1).88

Excluding the members of the examining board and those five who were already serving in the Army, the 19 appointees came from 15 states and the District of Columbia: one each from Alabama, California, Iowa, Maryland, Massachusetts, Montana, Nebraska, New Jersey, New York, Ohio, Washington, West Virginia, and Wisconsin; and two each from the District of Columbia, Missouri, and Pennsylvania. The new dentists' assignments reflected the Army's most pressing needs at the time, including orders to the Philippines, Puerto Rico, San Francisco, Kansas, Texas, Illinois, New York, and Virginia.⁸⁹

Although some criticized the difficulty of the board's examinations, in September 1901, Wilbur Litch expressed support for the standards:

Some exception has been taken to the character of the examinations thus far held. By many the theoretical examination especially has been regarded as unnecessarily severe, indeed in requirement far beyond what can reasonably be demanded of the dental student or practitioner. The subjects embraced in these examinations have, however, been only those found in the curricula of our best schools, and, if a higher standard of attainment in those studies has been demanded than is ordinarily exacted in college examinations, such advanced requirement can hardly be regarded as uncalled for.

It must be remembered that not only were the candidates on trial before the board, but that the board also and those whom they passed will be on trial by the army, the people, and, indeed, the whole civilized world. The success or failure of what must yet be regarded as the experimental organization of the dental corps will be largely

TABLE 6-1
CONTRACT DENTAL SURGEON EXAM STATISTICS

Reasons for Pass/Fail	Number of Candidates (out of 86 invited)		
Declined to appear	6		
Failed to appear	10		
Physically disqualified	8		
Fully examined and rejected	3		
Failed theoretical examination	7		
Withdrew by advice of the examiners	33		
(before completion of theoretical examina	tion)		

Data source: [Litch WF]. Some results of examinations for the Army Dental Corps. *Dental Brief.* 1901;6:551–553.

dependent upon the fitness or unfitness of those selected to inaugurate and carry on its practical work. If they prove thoroughly competent, zealous, and painstaking, possessing not only a high standard of educational fitness, but also practical skill as operators, its success may be regarded as reasonably assured.⁸⁸

Litch later commented that the only real problem with the dental legislation was that far too few dentists had been appointed given the amount of work required.⁹⁰

On July 31 the board completed its assignment after being in session continuously since February 18, and its members were sent to various stations. Marshall's orders to San Francisco included instructions for him to stop in Milwaukee, Wisconsin, to represent the Medical Department of the Army at the NDA meeting in August.⁷⁶ The board of examining and supervising dental surgeons was never reconvened.

Fitting Out the New Dental Surgeons

Contract dental surgeons were equipped with a special dental "outfit" especially prepared to meet the requirements of Army practice. Although designed for lightness and portability, it was considered better than what many starting dentists could afford. The portable dental outfit weighed about 450 pounds when cased and was designed to be carried by two horses or mules. It included an Army field desk, two folding chairs, and two folding tables. Canvas covers were provided to protect the cases from rain and moisture.76 Among the professional items in the outfit were a portable dental chair and a dental engine, packed in separate cases; burs, mandrels, stones, disks, and the like; excavators, chisels, scales, plastic-pluggers, gold-pluggers, rubber dam clamps, clamp forceps, a dam punch, extracting forceps, elevators, a steam sterilizer, and a hand cuspidor. In fact, the kit included all the instruments and adjuncts necessary to perform any operation upon the teeth except crowns, bridges, and artificial dentures. Each outfit contained supplies sufficient for 3 months' service. The smaller instruments and the supplies were packed in two strong cases, arranged with trays and receptacles to hold the contents in place. 91 The general hospitals and other posts designated by the surgeon general were furnished with an additional outfit, which included "a regular office operating chair, Allan bracket, cuspidor, instrument case, extra extracting forceps, and a full laboratory outfit for constructing vulcanite plates, swaged metal plates, interdental splints, crowns, and bridgework."91

Establishing Dental Care in the Army

The US Army of the early 20th century ran according to a clearly defined set of regulations that authorized and governed virtually every aspect of daily life. When the House of Representatives passed the Army bill in December 1900, Surgeon General Sternberg realized that it would soon become law, and he subsequently drafted an order establishing the regulations governing the eligibility, appointment, and duties of contract dental surgeons. He forwarded the draft provisions to the adjutant general on December 24 and requested that they be published as soon

as the bill passed. This draft, which was modified and amended on March 25, 1901, formed the basis for War Department General Order No. 52.92-94

As early as March 21 the War Department began establishing the status, responsibilities, and allowances of potential contract dental surgeons stationed at military posts or in the field. General Orders No. 39 (March 21) and 46 (April 6) authorized contract dental surgeons to make purchases from the quartermaster subsistence stores and to buy "such moderate quantity of mineral oil, lamps, wicks, and chimneys as they may need in the rooms occupied by themselves and their families." 95,96

On April 17 the War Department issued General Order No. 52, which, in paragraph 1395½, specified the provisions under which contract dental surgeons would operate in the Army. Relying heavily on Sternberg's draft, the four pages of paragraph 1395½ described the qualifications, obligations, assignments, operating procedures, office hours, eligible patients, supplies and equipment, and responsibilities of contract dental surgeons.⁹⁴

Dental surgeons were only authorized to treat "the officers and enlisted men of the Regular and Volunteer Army" during their normal operating hours of 9 AM to 4 PM. Neither the families of officers and soldiers nor civilian employees were eligible for treatment during these office hours; dental surgeons were allowed to provide care for those patients before and after the normal hours, but could not use government-furnished materials on them. The type of work allowed and materials to be used were clearly restricted:

Emergency work whether for officers or enlisted men should always have precedence. Plate work or restoration of teeth by any method will only be done for those



(a) Vulcanite partial denture, circa 1900. (b) Dentsply Trubyte Teeth, circa 1936. Photograph: Courtesy of the National Museum of Health and Medicine, Armed Forces Institute of Pathology. NCP 3271.

who have lost teeth in the service and in the line of duty. For plate work or filling teeth only the cheaper materials will be supplied, but gold may be used, if the operating dentist sees fit to use it, at the expense of the individual operated upon. 84(pp2-3)

Each dental surgeon had to keep a record of his work in a bound book, known as the "register of dental operations." Every month, he was required to send a "monthly record of dental operations" to the surgeon general's office. All records were kept permanently as means of identification in case of death or desertion, and for pension claims based upon tooth loss while in the service. 76,91,94

Several significant differences existed between Sternberg's draft and the final version of Order 52. The draft included information on the uniform of the dental surgeon that was not in General Order No. 52 but was published on April 18 in paragraph 26 of General Order No. 53.97 According to the regulation, "contract dental surgeons will be permitted to wear the undress and field uniform of an assistant surgeon with the rank of first lieutenant, the straps and ornaments to be in silver instead of gold, and block letters 'D.S.' in silver embroidery to be placed between the bars of the shoulder straps."98 When General Order No. 52 appeared, it included a lengthy new paragraph that authorized one enlisted soldier, usually detailed from acting hospital stewards or privates of the Hospital Corps, as an assistant for each dental surgeon to help with the instruments and to do other tasks as directed, laying the groundwork for the development of the enlisted dental assistants.⁹⁴

Even as the examining board was still meeting to select the first contract dental surgeons, the Army had already issued the basic regulations that defined their status, duties, uniforms, and medical relations. These details were soon circulating within the American dental community.⁹⁹

"A Department of Military Medical Practice"

At the June 1901 annual meeting of the American Medical Association (AMA) in Saint Paul, the section on stomatology organized a panel on "Military Dental Practice—Its Modifications and Limitations." Commenting on the new dental surgeons' challenges, Dr Henry Hatch of New York recommended that certain types of dental work, like fixed and removable prosthetics, orthodontics, and gold restorations, be completely eliminated from military dental practice because of the extra equipment, time, and expense they required. He also emphasized the value of dental charts and casts for identification purposes, stressing the assistance dental surgeons could give medical surgeons in treating battle casualties. 100

Dr AH Peck of Chicago then read the remarks of John Marshall, who was still working on examining board matters in Washington. Marshall's paper began with a ringing statement of the importance of what had been done in such a short time:

The passage of the Army Reorganization Bill with its section creating a Corps of Dental Surgeons for the U.S. Army, makes an epoch in the history of modern dental surgery; an epoch which has never had its counterpart before in the history of the world, the influence of which is destined to be far-reaching in its beneficent results, and of great importance in the elevation of our educational and professional standards. ¹⁰¹

Marshall believed that the creation of a military dental corps was a unique initiative that promised to enhance dentistry's professional status. This was particularly noteworthy, considering that a relatively short amount of time had passed since professional dental education had begun in the 1840s. Since then, the field had grown in prestige and technological sophistication, despite the skepticism of some.¹⁰¹

Although many in Congress and the Army viewed the creation of the dental service as an experiment, Marshall saw it as an opportunity for dentists to prove their value and confirm their expertise. He was sure recognition would be forthcoming in the creation of a permanent dental corps with commissioned members. The selection of the first dentists had been thorough and assured quality personnel, a fact that the medical departments of the European armed forces had already noted:

We have special reason for congratulation also in the fact that the Congress of these United States was the first legislative body in the world to formally recognize the *value* and *need* of the beneficent services of our specialty as a department of military medical practice, and that we have been given an opportunity to prove the wisdom of its action to our country and the world [emphasis in original].¹⁰¹

It had been almost exactly 19 years since Marshall had opened his own campaign for Army dentistry with his speech "The Need of Dental Surgeons in the Army and Navy" at a meeting of the same association in the same city. 102

The Feud between Williams Donnally and John Marshall

As the work of the examining board drew to a close in July 1901, John Marshall wrote to Williams Donnally of the NDA committee to inform him of the board's progress and of their discussions with Surgeon General Sternberg, who had cautioned them not to propose any new dental legislation. On July 29, 1901, Marshall apparently received a rather "extraordinary" reply from Donnally, which took him by "surprise." Marshall could not understand what he had said, done, or written, either in private or public, to "call forth such an epistle," but it was likely connected to Donnally's continuing resentment of not being selected for the examining board. After failing to contact Mark Finley, Marshall went to see Dr HB Noble and together they called on Donnally, but he had already left his office. Marshall then proposed to Donnally that they meet with Finley and Noble to straighten out any misunderstanding that had occurred. In the following years, the Donnally-Marshall cleavage proved damaging to efforts to obtain War Department and congressional approval for the Army Dental Corps.

Laying out the Future

Marshall and Oliver attended the August meeting of the NDA in Milwaukee, Wisconsin, as the official representatives of the Army Medical Department, establishing a pattern of participation and involvement that has continued ever since. In its third annual report, the Committee on Army and Navy Dental Legislation said that its work for the present was concluded, as far as the Army was concerned, with

the employment of 27 of the 30 authorized Army dental surgeons. While not everything they desired had been obtained, the committee reported:

We risked nothing, however, in contending for and obtaining the best status practicable or even possible under existing conditions. The flexible contract system was adopted by Congress to meet the emergencies growing out of the Spanish war and under the policy of the Medical Bureau it is an entrance-way for the better adapted to enter the commissioned ranks. . . . the necessity of permanently providing the army with competent dental service was almost universally accepted as settled, and there was a distinct understanding with the Surgeon-General that his approval of the terms of the bill was made with the intention of recommending, as soon as authority was granted for the commissioning of Contract Surgeons, that authority would be granted for the commissioning of Contract Dental Surgeons in such numbers as experience in the meantime would warrant. . . . Thus the transition of the corps from the contract to the commissioned status, under such restrictions as are suitable to protect the interests of the Government and the honor of the profession, was provided for in advance. 104(p217)

The committee then praised the efforts of Senator Pettus of Alabama, Representative Otey of Virginia, Major William Owen, and Dr Louis Ottofly of Manila for their efforts in securing the bill's passage in Congress. (Ottofly had obtained the endorsements of 85 Army medical surgeons and several hundred line officers serving in the Philippines and sent them to the committee with the consent of the military governor, Brigadier General Arthur MacArthur.)¹⁰⁴

More important than the committee's comments, though, were Marshall's thoughts, explained in his report, "Organization of the Dental Corps of the US Army, with Suggestions upon the Educational Requirements for Military Dental Practice." Colonel Walter Vail, who did pioneering research and publication on the early history of the Dental Corps during the 1930s, said this report was "unquestionably the most important document in the early history of military dentistry." 66,76,82 In it, Marshall discussed the early use of the unofficial term "Dental Corps of the US Army." He began by describing everything he and the examining board had done since February in organizing what he called the "Corps of Dental Surgeons"; they had examined, selected, and assigned the initial group of 19 contract dentists (excluding the 5 in the Philippines); inspected, selected, and procured office and field dental equipment and supplies; decided on uniform record-keeping and reporting systems along with a nosological table; and in their many discussions with the surgeon general and his staff, they had explored the future of the dental surgeons in the Army and possible commissioned status. 82

Marshall also discussed what he saw as the educational requirements for an Army dentist:

The Army dental surgeon, by reason of his military surroundings and associations and the isolated position in which he will often find himself professionally, will need to be broadly educated, and so expert in his calling that he will be capable of managing any case that may be presented to him for treatment. Many times we will be so placed, as for instance, at a remote post upon our western or southwestern frontier, in Cuba or the Philippines, that he can by no possibility obtain the aid of a suitable consultant or advisor; so he must rely entirely upon his own judgment and experience in con-

ducting his cases. It therefore becomes necessary that his general education shall be upon broad lines and his professional knowledge as complete as possible upon every department of dental practice. 82(pp38-39)

Marshall's many years of practice, teaching and working with students, and his recent experience on the examining board gave him a unique perspective on dental education programs, and he saw serious problems that needed correction:

The result of the examinations of our Board have shown very conclusively that we need to spend more time upon the theoretical subjects of the curriculum than we are now doing, if we would thoroughly prepare our graduates for army dental practice. . . . The result of these examinations, it would seem to me, prove very conclusively that there is great need of raising the standard of entrance requirements of our dental colleges, and of lengthening the course of instruction to four years, so as to be able to devote more time to the theoretical teaching. ^{82(p41)}

It was a number of years before Marshall's ideas were actually implemented in American dental education, but his concepts helped form the educational foundation of Army dentistry. In closing the first part of his report, Marshall summarized what had been achieved in 6 months and looked at the dangers that lay ahead:

In closing this part of my communication I desire to say, that I have been assured by scores of officers of the regular army whom I have met in Washington that our corps will be most cordially welcomed wherever it may be sent, for there is dire need of its services, and this is especially true in Cuba, Porto Rico [sic] and the Philippines. We are encouraged by these gentlemen to believe that it is only a question of time when the corps will be made permanent by giving its members commissions. It will be necessary, however, in my judgment before commissions can be obtained to first prove two things, namely—Is the corps necessary to the health and efficiency of the army? And does it pay in dollars and cents? These will be questions that must be answered to the satisfaction of Congress before any more legislation along this line can be expected. 82(pp37-38)

He went on to caution that once the Philippine fighting ended, Congress would begin cutting costs because "the volunteers who have friends in every community are now all at home, and there will no longer be any strong political influence brought to bear upon our senators and congressmen on behalf of the regulars." After that, dentists must show Congress:

that our corps is not only necessary to the good health, and consequently to the efficiency of the army, but it must be shown that it pays; that from a financial standpoint it is a matter of economy; that by having dental surgeons in the army much loss of services from incapacity for duty, resulting from dental and oral diseases, and by reason of necessary leave, often of weeks, in order to have troublesome teeth treated and filled, will be prevented. Congress would decide the future of Army dentistry on the basis of dollars and cents and military efficiency.

We have been given a chance to prove ourselves a beneficent profession in an entirely new and untried field, with no precedents to guide or experience to warn us of the

dangers in our pathway or of the obstacles to be overcome. But I believe that the young men who form the dental corps of the U.S. Army will prove themselves equal to the occasion and bring honor upon the profession to which they belong. 82(p38)

"The Dental Corps"

After February 1901, John Marshall, Robert Oliver, other contract dental surgeons, and the dental press almost immediately and consistently began using the terms "Corps," "Dental Corps," "Army Dental Corps," "Corps of Dental Surgeons," and even "United States Army Dental Corps" to refer to the 30 civilian contract dental surgeons working for the Medical Department. The Army Reorganization Act of February 2, 1901, established the composition of the Medical Department, including in it medical officers, the Hospital Corps, and the new Nurse Corps, and authorized the surgeon general to employ contract dental surgeons. On March 3, 1911, the Dental Corps was officially authorized in the formal organizational structure and staffing of the Medical Department. Until then, dental surgeons were only referred to as "dental surgeons, as now authorized by law, but never "Army Dental Corps" or "US Army Dental Corps." 105–110

Marshall's presentation at the NDA meeting in August 1901 used the term "Dental Corps" consistently. On August 30, 1904, at the Fourth International Dental Congress in Saint Louis, Marshall presented a detailed discussion of the selection, functions, and work of the contract dental surgeons in the Army in a paper titled "The United States Army Dental Corps." In addition to the paper's title, one section was called "Plan of Organization of the United States Army Dental Corps." Variations of the term "Dental Corps" were routinely used throughout the dental press in its discussion of contract dental surgeons, in proposed legislation in both houses of Congress, and by the contract dentists themselves in their articles and correspondence. Despite this common use, regulations, correspondence, memoranda, and reports of the US Army and the Medical Department from February 1901 to March 3, 1911, usually used the term "dental surgeons," and only occasionally the terms "Corps of Dental Surgeons" and "Dental Corps." 82,88,90,91,111-114

Now, if contract dentists proved their value to the Army and Medical Department, they might finally become a commissioned corps. Regardless of the formalities of official Army terminology and organization, what Marshall and many dentists had striven for so ardently since the 1850s at last was a reality, but much hard work remained to be done.

References

- 1. Congressional Record, 55th Cong, 2nd Sess. Vol 31. Washington, DC: Government Printing Office; 1898: 3942, 4561, 5361.
- 2. [Kirk EC]. Dentists in the Army and Navy. Dental Cosmos. 1898;40:593.
- 3. V[ail] WD. Organization day. *Dental Bulletin Supplement to the Army Medical Bulletin*. 1933;4:70,71.
- 4. [Ottolengui R]. Dentists in the Army. *Items of Interest*. 1898;20:522.
- 5. Resolutions adopted by the Odontographic Society, the Chicago Dental Society and the Odontological Society of Chicago. *Dent Rev.* 1898;12:572.
- 6. [Harlan AW]. Dentists in the Army and Navy. Dent Rev. 1898;12:566.
- 7. Stanley CC. Dentists in the Army and Navy. Dental Cosmos. 1898;40:558.
- 8. [Taft J]. Dentists in the Army. Dental Register. 1898;52:345–346.
- 9. Dentists in the Army and Navy. Tex Dent J. 1898;16:92.
- 10. [Hunt GE]. A failure. Ind Dent J. 1898;1:811-813.
- 11. Walker WE, comp. Minutes of transactions of the National Dental Association, session of 1898. Cited in: *Transactions of the National Dental Association*. Philadelphia Pa: The SS White Dental Mfg Co; 1899: 33, 50–57.
- 12. Congressional Record, 55th Cong, 3rd Sess. Vol 32. Washington, DC: Government Printing Office; 1899: 51, 1253, 1290.
- 13. US Congress. House. *Reorganization of the Army*, 55th Cong, 3rd Sess, 1898. House Report 1709; pt 1: 2.
- 14. [Taft J]. Dentists in the Army and Navy. Dental Register. 1899;53:46.
- 15. Finley MF, Butler CS, Donnally W. Report of Committee on the Appointment of Dentists to the Army and Navy. Cited in: *Transactions of the National Dental Association*. Philadelphia, Pa: The SS White Dental Mfg Co; 1900: 12, 56–58, 193, 194.
- 16. [Kirk EC]. The appointment of dental surgeons in the Army and Navy service of the United States. *Dental Cosmos*. 1899;41:188.
- 17. Wood W. The necessity of dentists in the Army and Navy. Cited in: *Transactions of the National Dental Association*. Philadelphia, Pa: The SS White Dental Mfg Co; 1900: 205–206.
- 18. Moore LC. Dentists in the Army and Navy. Cited in: *Transactions of the National Dental Association*. Philadelphia, Pa: The SS White Dental Mfg Co; 1900: 192.

- RL Polk & Co. R.L. Polk & Co.'s Dental Register of the United States 1896–97. 2nd ed. Detroit, Mich: RL Polk & Co; 1896:248.
- 20. [Fife JG]. Dentists in the Army and Navy. Tex Dent J. 1899;17:36–37.
- 21. [Litch WF]. Army and Navy Dentists. Dental Brief. 1899;4:406–407.
- 22. Sibley LW. The necessity for dental surgeons in the Army and Navy. Cited in: Seventh District Dental Society, State of New York [proceedings]. *Dental Cosmos*. 1899;41:687–688.
- 23. [Ginsti JJ]. Need of dental services in the Army. Items of Interest. 1900;22:154.
- 24. Stark WT. Dentists in the Army and Navy. West Dent J. 1899;13:97–99.
- 25. Heitman. Historical Register. Vol 2. 259.
- 26. [Patterson JD]. Dentists in the Army and Navy. West Dent J. 1899;13:139.
- 27. Fish WL. Report of committee in relation to dentists in the Army. *Items of Interest*. 1900;22:67–68.
- Marshall JS. The United States Army Dental Corps. Cited in: Transactions of the Fourth International Dental Congress. Vol 1. Philadelphia Pa: The SS White Dental Mfg Co; 1905: 54–55.
- 29. Catching BH. Army and Navy dental surgery. Int Dent J. 1899;20:716,717.
- 30. National Dental Association [proceedings]. Dental Cosmos. 1899;41:916.
- 31. Chupein TF. Dentists for the Army and Navy. Dental Office and Laboratory. 1899;13:142,143.
- Congressional Record, 56th Cong, 1st Sess. Vol 33. Washington, DC: Government Printing Office; 1900.
- 33. [Ottolengui R]. Dentists in the Army. *Items of Interest*. 1900;22:76–78,218–219.
- 34. Dentists in the Army, H.R. 972. Dental Office and Laboratory. 1900;14:91–92.
- 35. Donnally W. Army dental surgeons. Ind Dent J. 1900;3:103.
- 36. Dental Surgeons for the Army and Navy. Dental Headlight. 1900;21:45.
- 37. Army dentists. Dental Digest. 1900;6:66–67.
- 38. The Odontographic Society of Chicago [proceedings]. Dent Rev. 1900;14:887–888.
- 39. [Kirk EC]. Dental surgeons in the Army and Navy. Dental Cosmos. 1900;42:102–103.

- 40. Dental surgeons for the Army. Dental Brief. 1900;5:166.
- 41. Donnally W. Report of the Committee on Army and Navy Dental Legislation. Cited in: Transactions of the National Dental Association. *Dental Digest*. 1902:217–218.
- 42. Finley MF, Butler CS, Donnally W. Report of the Committee on Army and Navy Dental Legislation. Cited in: *Transactions of the National Dental Association*. Philadelphia, Pa: The SS White Dental Mfg Co;1907:20,21.
- 43. US House. Dental Surgeons in the United States Army, 56th Cong, 1st Sess, 1900. House Report 468: 1–3.
- 44. [Harlan AW]. Dentists for the Army and Navy. Dent Rev. 1900;14:162–163.
- 45. Dentists in the Army. *Int Dent J.* 1900;21:137–138.
- 46. [Ottolengui R]. Dentists in the Army. *Items of Interest*. 1900;22:218–219.
- 47. [Ottolengui R]. Dental bills in Congress. *Items of Interest*. 1900;22:306.
- 48. [Litch WF]. The supervising board of Army dentists. Dental Brief. 1900;5:230,289.
- 49. [Hunt GE]. The supervising board of Army dentists. *Ind Dent J.* 1900;3:535.
- 50. National Dental Association [proceedings]. Dental Cosmos. 1900;42:895,902,903.
- 51. Finley MF, Butler CS, Donnally W. Report of the Committee on Army and Navy Dental Legislation. Cited in: *Transactions of the National Dental Association*. Philadelphia, Pa: The SS White Dental Mfg Co; 1901: 213–214.
- 52. National Dental Association [proceedings]. Dental Cosmos. 1901;43:72–73.
- 53. Baldwin AE. Handwriting upon the wall: what does it portray? *Dental Cosmos*. 1900;42:793.
- 54. Congressional Record, 56th Cong, 2nd Sess. Vol 34. Washington, DC: Government Printing Office; 1901.
- 55. Army reorganization bill as it relates to dentists. *Dental Digest*. 1901;7:62–65.
- 56. Obituary. Dr. Henry J.B. McKellops. *Dental Cosmos*. 1901;43:702–704.
- 57. [Litch WF]. 'Contract' Army dentists and surgeons. Dental Brief. 1903;8:742–743.
- 58. [Harlan AW]. The Army reorganization bill. The pressure for dental surgeons as the bill was finally passed. The appointment of examiners. *Dent Rev.* 1901;15:175.
- 59. [Litch WF]. Dental surgeons in the Army. Dental Brief. 1901;6:225,227.

- 60. [Kirk EC]. The Army dental examining board. Dental Cosmos. 1901;43:309–310.
- 61. [Kirk EC]. A bit of dental history. Dental Cosmos. 1901;43:432.
- 62. [Kirk EC]. Dentistry and the United States government. Dental Cosmos. 1901;43:696–701.
- 63. Editorial. Aust J Dent. 1901;4:303.
- National Archives and Records Administration. Record Group 112. John Marshall to Brigadier General George Sternberg, May 21, 1900. Letter. No. 70760. Entry 26. Box 449.
- National Archives and Records Administration. Record Group 112. Sternberg to Marshall, June 30, 1900. Letter. No. 70760. Entry 26. Box 449.
- 66. [Vail WD]. John Sayre Marshall, pioneer Army dental surgeon (1846–1922). *Dental Bulletin Supplement to the Army Medical Bulletin*. 1940;11:111–112.
- 67. CGH. In memoriam: Dr. John Sayre Marshall. Dent Items Interest. 1923;45:70.
- National Archives and Records Administration. Record Group 15. Pension file, John Marshall. No. 94:149.
- Dummett CO, Dummett LD. Culture and Education in Dentistry at Northwestern University Dental School (1891–1993). Chicago, Ill: Northestern University Dental School; 1993.
- 70. Koch CRE, ed. *History of Dental Surgery*. Vol 1. Fort Wayne, Ind: National Art Publishing Co; 1910.
- 71. Heuer MA. Northwestern University Dental School: a historical narrative. In: *Alumni Midwinter Events February 15-18, 1992*. Chicago, Ill: Northwestern University Dental School; 1992.
- 72. Colonel Robert Todd Oliver (1868–1937). *J Am Dent Assoc, Dental Cosmos*. 1937;24:1532.
- 73. National Archives and Records Administration. Compiled Military Service Record. Record Group 94. Robert T Oliver. 27 Battery Indiana Light Artillery.
- National Archives and Records Administration. Record Group 109. Robert W Morgan, Co C, 11 Virginia Infantry. Microfilm Publication M 324, roll 507.
- 75. Stickley RP, Amowitz JD. *The Lynchburg Dental Society presents one hundred and forty-three years of dentistry*. Lynchburg, Va: Lynchburg Dental Society; 1964: 44–47.
- 76. V[ail] WD. Organization of the Dental Corps. Dental Bulletin Supplement to the Army Medical Bulletin. 1933.
- 77. [Clapp GW]. Army dental examiners. Dental Digest. 1901;7:141.

- 78. [Ottolengui R]. Dentists in the Army at last. *Items of Interest*. 1901;23:225,226.
- 79. National Archives and Records Administration. Record Group 112. Peter D Otey to president of US, February 2, 1901, with attachments. Letter. No. 77614. Box 509. Entry 26.
- 80. [Truman J]. The Army Examining Board. *Int Dent J.* Cited in: *Pacific Dental Gazette*. 1901;9:391–394.
- 81. [Truman J]. Dental surgeons in the Army. Int Dent J. 1901;22:197.
- 82. Marshall JS. Organization of the Dental Corps of the U.S. Army, with suggestions upon the educational requirements for military dental practice. *Transactions of the National Dental Association*. Chicago, Ill: Dental Digest;1902:32–46.
- 83. National Archives and Records Administration. Record Group 112. Dr Marshall to Dr Williams Donnally, July 26, 1901. Entry 311: 113, 111–112.
- 84. Sternberg GM. Memorandum concerning the employment of contract dental surgeons in the Army. *Dental Brief.* 1901;6:358–359.
- 85. Marshall JS. Army dental examinations. Dental Digest. 1901;7:212–213.
- 86. Sorber OM. The United States Army Dental Service. *Dental Brief.* Cited in: *Pacific Dental Gazette*. 1904;12:251.
- 87. US Army Dental Surgeons Corps. Dental Cosmos. 1901;43:825–826.
- 88. [Litch WF]. Some results of examinations for the Army Dental Corps. *Dental Brief*. 1901;6:551–553.
- 89. Marshall JS. Dentists in the U.S. Army. Dent Reg. 1901;55:558–59.
- 90. [Litch WF]. Equipment of the Dental Corps. Dental Brief. 1901;6:554.
- 91. Marshall JS. The United States Army Dental Corps. In: *Transactions of the Fourth International Dental Congress*. Vol 1. Philadelphia, Pa: The SS White Dental Mfg Co; 1905: 46–47.
- 92. National Archives and Records Administration. Record Group 112. Surgeon General Sternberg to the adjutant general, December 24, 1900. Letter with enclosures. No. 77614. Entry 26. Box 509.
- 93. National Archives and Records Administration. Record Group 112. Sternberg to adjutant general, March 25, 1901. Letter with enclosure. No. 77614. Entry 26. Box 509.
- 94. US War Department. General Orders and Circulars, Adjutant General's Office, 1901. Washington, DC: Government Printing Office. 1902; No. 52, par 1395, 2, April 17, 1901: 1–4.

- 95. US War Department. General Orders and Circulars, Adjutant General's Office, 1901. Washington, DC: Government Printing Office. 1902; No. 39, March 21, 1901; par 1280.
- 96. US War Department. General Orders and Circulars, Adjutant General's Office, 1901. Washington, DC: Government Printing Office. 1902; No. 46, April 6, 1901, par 1020.
- 97. US War Department. Enclosure to letter, Sternberg to the adjutant general, December 24, 1900, 2. *General Orders and Circulars, Adjutant General's Office, 1901*. Washington, DC: Government Printing Office. 1902. No. 77614.
- 98. US War Department. General Orders and Circulars, Adjutant General's Office, 1901. Washington, DC: Government Printing Office. 1902; No. 53, 18, par 26, April 18, 1901.
- 99. Army Dental Surgeons, rules and regulations. Dental Brief. 1901;6:310–311.
- 100. Hatch HD. Military dental practice: its modifications and limitations. *JAMA*. 1901;37:164–165.
- 101. Marshall JS. Opening discussion on military dental practice: its modifications and limitations. *JAMA*. 1901;37:165–166.
- 102. Marshall JS. The need of dental surgeons in the Army and Navy. In: *Transactions of the American Medical Association*.
- National Archives and Records Administration. Record Group 112. Marshall to Williams Donnally, July 30, 1901. Letter. Entry 311:114.
- Donnally W. Report of the Committee on Army and Navy Dental Legislation. In: Transactions of the National Dental Association. Chicago, Ill: Dental Digest;1901:217–219.
- 105. Congressional Record. Act of Feb. 2, 1901. 56th Cong, 2nd session, Sec 18, 31 Stat 752, Section 1.
- 106. Congressional Record. Army Medical Reorganization Act. Act of April 23, 1908. 61st Cong, 35 Stat 66.
- 107. The Medical Department. Chap 19. *US War Department, the Military Laws of the United States 1915*. 5th ed. Washington, DC: Government Printing Office; 1917.
- 108. Office of the Surgeon General. *Manual for the Medical Department*. Washington, DC; Government Printing Office; 1906.
- 109. National Archives and Records Administration. Record Group 112. John Sayre Marshall to the surgeon general, August 19, 1902. No. 89178. Box 616. Entry 26.
- 110. National Archives and Records Administration. Record Group 112. John Sayre Marshall to the surgeon general, May 29, 1903. No. 89178. Box 616. Entry 26.
- 111. Army Dental Corps items. Dental Cosmos. 1903;40:983.

- 112. Army Dental Corps items. Dental Cosmos. 1905;44:543.
- 113. The Army Dental Corps. *The Pacific Dental Gazette*. 1904;12:429–432.
- 114. Marshall JS. The United States Army Dental Corps. In: *History of Dental Surgery*. Vol 1. Fort Wayne, Ind: National Art Publishing Co; 1910.