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**Uncommon soldiers in the common school era: The education
of noncommissioned officers and selected privates of the United
States Army, 1866-1908**

Sacca, John Wands, Ph.D.

State University of New York at Albany, 1989

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Uncommon Soldiers in the Common School Era:
The Education of Noncommissioned Officers and Selected
Privates of the United States Army, 1866-1908

by

John Wands Sacca

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1989

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ABSTRACT

This study attempts to fill a significant gap in the history of military education for the period between the Rebellion and Great War. The education of commissioned officers and common soldiers has been researched by modern scholarship to the exclusion of that of noncommissioned officers. Quite unlike their European contemporaries, these men were held in low esteem by superiors and subordinates alike, and given neither adequate prestige, privilege, pay nor pension by the War Department.

Yet their increasing utility to the army made itself felt. Officer absenteeism due to resignation, leave, detached service, and careerism, left a leadership shortfall at each company, battery and troop that would be compensated for by long-service sergeants. Scattered frontier commands and new small unit tactics expanded their leadership role. Improved technology led to the creation of such new specialists as electricians and mechanics. The rudiments of a common school education would not only be necessary to the efficient service of a noncommissioned officer of the line of the army, but a precondition to his professional instruction, while a thorough common school education became requisite to the advanced technical education for the specialists of the artillery, engineers and signal corps.

The initiative for this education rested with reform-minded officers and the commandants of the service schools. Products of the civilian common schools themselves, these men were atypical officers; often evangelical in their religion, republican in their social outlook, Republican in their politics, sober in temperament, and always, paternalistic, they attempted to reform the army by providing it with a better class of noncommissioned officer. Along with libraries and reading rooms, they organized classes in general and professional subjects at the post schools. Their demands of the War Department for professional instruction lead to the establishment of the so-called 'captains' schools' after 1888. The preeminent schools for specialists of coast defense were found at Fort Monroe, Virginia, and Willets Point, New York Harbor.

The degree to which, and the speed at which the army modernized, can be measured by the progress in the professional and technical education of its noncommissioned officers, that group of men upon whom fell the duties as foremen and supervisors, small unit leaders, and technical specialists in an institution made complex by change in human and technological dimensions.

For my parents
and
To the Memory of
Edward V. Gleeson
CBM, U.S.N. Ret.
(1911 - 1981)
Poet Scholar Sailor

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INTRODUCTION

From its inception until the Great War, the history of the noncommissioned officer corps of the United States Army was quite unlike that experienced by the noncommissioned officer corps of European armies. Not only was its development dissimilar, but the usage of noncommissioned officers in the United States Army provides an interesting contrast with those of European armies, especially England, France, and Germany.

The importance of the British noncommissioned officer to his voluntarily recruited force was in his role as trainer. He was, in fact, a surrogate officer who imitated the elite manners of his aristocratic officers. The French noncommissioned officer had a more limited role in his conscript army, himself often a substitute for other conscripts. He was a member of a pool from which junior commissioned officers were chosen, and only on being commissioned did his role and authority become similar to that of the British noncommissioned officer. A desire for social mobility was his great incentive. The German noncommissioned officer was a professionally trained cadre in peace time, and the basis upon which the universally conscripted army was expanded when mobilized. One function common to all of these noncommissioned officers was that of foreman and supervisor in establishments made complex by

change in both human and technological dimensions. They were all expected to be literate and to possess at least the rudiments of a common school education.

The noncommissioned officer of the United States Army was not relied upon as a trainer to the same degree. He was voluntarily recruited, often an immigrant, and found it virtually impossible to gain a commission by merit alone. Prior to 1888, the average noncommissioned officer of the line, staff or post, could never expect to attend a professional course of instruction. A noncommissioned officer of the line might even be functionally illiterate. Far from being a foreman or supervisor, he was relied more upon for his ability to physically coerce subordinates rather than for his powers of persuasion. Little respect was received from those subordinates, some of whom earned more money than their noncommissioned officers by performing extra duty. Under pressures to modernize the army into a professional force, and using the armies of Europe as models of professional success, reform-minded officers and civilians set themselves the goal of changing this situation.

Indeed, the nineteenth century saw a revolution in the thinking of progressive officers in all modern armies. Over the course of the century, autocracy on the part of the officer caste, often through methods of brutal coercion, was replaced by an attitude of paternalism and

the use of incentive. It is a curiosity that in the army of the United States this growing concern for the morale of the enlisted soldiers on the part of a paternalistic officer corps rarely included that of the noncommissioned officers. Their inclusion came only after the belief became common among the members of that fraternal group that noncommissioned officers were key elements in the functioning of a paternalistic system, assessors of the soldiers' morale and, by virtue of their closeness to the common soldiers, the primary instruments for their motivation and control. Until this consensus came about, the noncommissioned officers of the United States Army found at least one undisputed function during the nineteenth century; unplanned for and unprovided for, they became a stabilizing influence in each regiment, company, battery and troop, their long service and familiarity with the common soldiers filling the void resultant from officer absenteeism caused by leave, resignation, detached service, rotation and careerism.

As such, noncommissioned officers became the 'middle managers' in the complex organization of the army. This role was compounded by the effects of technology and tactics in the late nineteenth century which forced the army to operate in smaller tactical units under the command of junior noncommissioned officers. Finally, by the turn of the century, technology had developed to such a degree

that the military technician and specialist had come into his own. An ever-increasing variety of military specialties required not only trained soldiers, but educated soldiers. A common school education became the prerequisite for advanced technical instruction in the operation of new weapons and equipment especially in coast defense.

Lenore O'Boyle has aptly characterized the study of education in the United States as being "centered on the development of the school system as such, and on the way in which the system had expressed American political and religious values."¹ The temptation to see the development of education in the army in such terms is compelling. In his comprehensive study of the post schools for enlisted men, Bruce White analyzed the motives of the army educationists in terms similar to those of the civilian educationists: idealism, professionalism, and moral utility.² Robert D. Miewald has interpreted the development of the post schools in terms of organizational dynamics.³

This study reaffirms the conclusions of White and Miewald, yet attempts to go a step beyond. O'Boyle has suggested an alternative methodology for the analysis of nineteenth-century education, one utilizing 'common units of analysis,' in this instance, occupational groups.⁴ In choosing a group of professional soldiers within the rank

and file, i.e. the noncommissioned officers and privates selected for advancement to the noncommissioned grades, education given in the army may be studied in terms of the occupations of these men and the material circumstances attending those occupations.

This cannot be done to the exclusion of a more traditional examination of system, politics and religion, however. Indeed, they are crucial to the interpretation. Yet by keeping central to the methodology of the study an analysis of occupations, a more balanced syntheses emerges. Lastly, O'Boyle identifies a problem in such an analysis; "to determine the precise fashion in which school and society interact."⁵ Only the reader may judge whether or not this question had been adequately resolved.

NONCOMMISSIONED OFFICERS AND REFORM

When enlisted men absent themselves from their units they risk the military crime of desertion. Desertion ran high in the nineteenth century; averaged between war and peacetime, a quarter of the Regular Army deserted. When an amnesty was proclaimed in 1873 it was discovered that about one-third of the army were deserters. The reform movement was motivated in large part by the desire to stem this tide of desertion.¹

The commissioned officer, on the other hand, may return to civil life at will through the instrument of resignation, the traditional privilege of the gentleman. Resignations tended to rise sharply in times of danger or financial deprivation. In the crisis year of 1778 at Valley Forge, so many officers resigned that it was reported of Washington "that his Excellency expressed fears of being left alone with the soldiers."²

Into this void stepped the noncommissioned officer as the authority of the officer devolved, of necessity, upon him. Not being able to resign, the noncommissioned officer

had either to desert or take charge. How he used that authority might depend upon the needs of his soldiers. It was a Sergeant Williams, a propertied Pennsylvanian and British army deserter, who, along with a board of eleven other sergeants, led a mutiny of the Pennsylvania line in 1781 and marched his men along with six pieces of artillery from Morristown and Princeton to negotiate with Governor Reed and the Committee of Congress for the soldiers' pay.³ Mature leadership was required on such occasions as was attested by a corporal during the Civil War:

To add to our physical miseries, the morale of our company was lowered by the resignations of two of our officers, leaving us under a rough, inconsiderate lieutenant, who treated us as he had treated men before the mast when he had been the mate of a ship. Our orderly (top) sergeant, Frank Osborn, an uneducated man of high character, stood between us and conditions almost approaching mutiny.⁴

Officers might also apply to the War Department for leave, usually from one to eight months in length, with the possibility of extension upon further application. Sick leave offered easy opportunity for abuse of this privilege and an officer might use his ostensible illness to visit family during a harsh frontier winter. Leave could also be used to size-up employment opportunities in the civilian community while he considered the merits of tendering his resignation or returning to active duty.⁵

1. Detached Service

The greatest cause of officer absenteeism prior to the Great War was the system of detached service. Since the establishment of the Regular Army in 1775, the Congress was unwilling to provide for any but fighting men to fill the three arms of the service; infantry, mounted, and artillery. Each appropriation act set forth in detail tables of organization for each regiment of the line, units often officered only on paper, many of the assigned officers to be found on detached service to the numerous duty positions with the staff necessary to the functioning of the army, yet not funded or provided for by Congress, to include the Departments of Adjutant General, Inspector General, Judge Advocate General and the Quartermaster General, the Subsistence, Pay, Medical and Ordnance Departments, and Engineer Corps. Thus only the line was funded and the staff was filled by officers of the line detached to the staff for several years each, while their positions in the line were vacant. In the absence of these officers, it became the burden of the noncommissioned officers to maintain stability and provide leadership.

Over the course of the nineteenth century, detachment to the staff at the expense of the line increased. Particularly draining on the company grade officers were assignments to the lower level staffs such as regimental

and post adjutants, or post quartermasters. Add to this those absent with leave, sick, and on recruiting service, and it is not surprising that the companies had often less than one-half of the required number of officers for field service.⁶

Two developments of the 1830s tried to ease this situation. 1832 saw the formal recognition of the position of company first sergeant, also known as orderly or "top" sergeant. This noncommissioned officer was, in civilian parlance, the foreman, the common soldiers being the artisans.⁷ He was in the curious position of being the captain's confidant and agent in dealing not only with the noncommissioned officers and private soldiers but with lieutenants, as well. His dilemma was the ill-defined nature of his role which led to endless conflict with junior officers as to his status within the company. Junior officers appointed from civil life, as most officers were, resented having to rely upon his coaching due to their inexperience.⁸

Professional officers, on the other hand, appreciated and came to rely on them. When Second Lieutenant John M. Schofield arrived at Fort Moultrie, South Carolina, for his first assignment after graduating from the Military Academy in 1853, he found only one officer on duty with his battery. But he was soon alone, as that officer went on leave. For such inexperienced officers, a good first

sergeant was a blessing, as Schofield later recalled.

In the morning the first sergeant reported to me, with the quarterly and monthly returns prepared for my signature, and made out more beautifully than anything in writing I had ever before seen, and explained to me in detail all the business affairs of the battery...I was quite sure there stood before me the finest-looking soldier in the United States Army. What a hard time young officers of the army would sometimes have but for the old sergeants!⁹

During the year 1836, the actual number on detached service amounted to 37 percent of the total number of officers of the line. Another attempt to stem the loss of officers from the line was made in the law of July 5, 1838 which created new, funded staff positions. Officers were also forbidden employment on civil projects or in incorporated companies, nor could they be employed by the Indian Department. Any good that might have resulted was negated, however, by the increased demand for officers as supernumeraries in the Quartermaster and Commissary Departments.¹⁰ In fact, the number of officers needed for detached service continued to grow.

In addition to those detached to the staff, all of the officers who were instructors at the Military Academy at West Point and the Artillery School at Fort Monroe, all on recruiting service, all who were aides-de-camp, and many in the Signal Corps, were taken from the officers assigned to the line.¹¹ The Morrill Act of June 17, 1862, which made land grants to the states for educational purposes,

provided a new category of detached service, that of military instructor. Assignment of officers from the retired list was suggested but seldom followed. In 1868, the act was extended and the President empowered to assign up to twenty officers to schools with more than 150 male students.¹²

2. Calls for Reform

In 1880 First Lieutenant Henry Romeyn, 5th Infantry Regiment, complained that the land grant colleges were a drain on the active service. A check by him of the army register indicated that eighteen years after the passing of the Morrill Act, no retired officers were in use at any of the thirty incorporated institutions authorized such instructors, and that all such instructors were detailed officers of the Regular Army.¹³ President Hayes shared this concern to the extent that in the same year he recommended that the assignment of professors of military science and tactics to colleges and universities be limited to those on the retired list as was originally intended.¹⁴

A company deprived of its commanding officer for any length of time was regarded as an 'orphan company.' Colonel William Babcock Hazen, commanding the 6th Infantry Regiment, pointed out that of the 542 officers detached to the staff in 1871, 293 were company grade officers;

captains and lieutenants.¹⁵ In an attempt to keep captains in their commands, a regulation of 1881 provided that captains were not to remain detailed to duties which separated them from their companies for any "considerable" period of time. That this regulation went unheeded was illustrated in 1883, when Adjutant General Richard Coulter Drum reported that there were 102 line captains absent from their commands - nearly 24 percent of the whole number of line officers of that grade. As to those captains still with their companies, due to slowness of promotions, many were, as General O. O. Howard observed, "old and worn out."¹⁶ Good first sergeants became the major administrative functionaries in such companies.

Assignment to detached service with the staff was often accomplished through the political machinations of congressmen at upper echelons, and through social ingratiating with 'the drinking class' on the regimental level. Commanding officers of regiments and higher echelons would frequently retain their favorite staff officers as long as they held command. Lieutenant Colonel Emory Upton, 4th Artillery Regiment, perhaps the most influential of the reformers, took a shot at this abuse of detached service in 1878 by pointing out its use and inherent failings among the British in India. He characterized it as a haven for the politically ambitious or just lazy who after years of such service were unfitted

for command. In recommending that the time spent with the staff be strictly limited and on a rotating basis, he revived the ignored proposal made but a few years earlier by the commanding general, William T. Sherman, who also wished to see assignment to detached duty made only by superiors rather than through the demands of politicians.¹⁷

In the same year, Representative James A. Garfield adapted Upton's proposal of rotation between the line and the staff. Unlike Upton, however, Garfield appealed to his civilian audience's sense of fair play by claiming that such a policy would extend to officers working under the daily hardships of the frontier a well-deserved staff assignment on a rotating basis. This attempt to legislate rotation of officers between the line and the staff would be rejected by the Congress in 1879.¹⁸

In 1885, Secretary of War William Crowninshield Endicott ordered the restriction of detached officers, when so assigned by the lieutenant general or commanding generals of divisions, or departments, to a four-years' tour. His critics claimed that he had "exceeded his legal authority in interfering with the details on the personal staff of commanding generals, who are certainly the best judges in the matter."¹⁹ Sheridan, the commanding general, demanded of the Secretary of War that his staff be exempted from the order.²⁰

Endicott's tenure saw a real incentive given for

junior officers to stay with the line when legislation by the Congress on October 1, 1890, provided for linear promotion between regiments from second to first lieutenant. Prior to this, all promotion up to the grade of captain was within the regiment of assignment. Although this systems bred regimental feeling and pride, it did so at the expense of promotion on merit. This reform was attacked as an attempt to "rob the army...of its esprit de corps, and destroy that friendly spirit of emulation among the regiments to which they owe so much of their life and vigor." The young officers of the regiment, critics held, made their reputation in the regiment, in the eyes of their men. "This they may know from experience in the case of the old soldier or from hearsay in the case of the recruit. In either case the mutual confidence between the officer and the soldier is one which is born and strengthened by long intercourse, and cannot be transferred from one organization to another."²¹

Those who favored the change claimed that it would be too gradual to cause harm, while the good to be gained from such reform would far outweigh the detractions.²² In 1895, an anonymous contributor to a The United Service deduced that about half of the active service officers must be on detached service. That would have been at least six-hundred line officers. He expressed fear of the service gradually becoming "an army on paper." "Those two letters

(D.S.)," he concluded, "are more responsible for the present low standard of discipline in the army...than anything else I can think of."²³

Despite efforts to reduce all unnecessary details during the Spanish American War, 469 officers were taken from the line of the Regular Army - 233 to officer the volunteer units, and 236 upon detached service. Just after the war, the artillery experienced such an embarrassing shortage of officers due to their excessive use at the Military Academy, on recruiting duty, and college duty that Secretary of War Elihu Root directed that, in future, officers for such duties be furnished from the three arms proportionately.²⁴

3. Rotation

Under Root, the most prominent civilian reformer and promoter of the ideas of Upton, legislation was passed by Congress on February 2, 1901, which provided that future vacancies in the lower grades of the staff departments would be filled by the detail of officers for no more than four years, at the completion of which time such officers detailed would return to the line for at least two years before being eligible for further detail. A most important part of the law, section 27, provided that each position vacated with the line would be filled by promotion in the

line and by officers returning from the staff.²⁵

In increasing the number of officers on active duty to cover the needs of the staff, the Congress was finally making acknowledgment that the old system was an "attempt to practice an unwise economy...because the line could not stand the depletion of officers which resulted." The new system of detached service was becoming a system of rotation which not only preserved the line, but operated "to cause promotions, according to seniority, from lower grades to each vacancy."²⁶

A law of August 24, 1914, known in the army by the nickname of "the Manchu Law," provided that no company grade officer not present for duty with the line for at least two of the preceding six years would be allowed to be detached nor remain detached from his unit. As a penalty against any superior officer who would defy the law, it further provided that "all pay and allowances shall be forfeited by [said officer] for any period during which, by his order, or his permission, or by reason of his failure or neglect to issue or cause to be issued the proper order or instructions at the proper time, any officer shall be detached or permitted to remain detached in violation of any of the terms of this proviso."²⁷

A further complication to reform of the system of detached service was the maintenance of large numbers of regular army regiments abroad as a result of the

expansionist and interventionalist policies of the United States Government between 1898 and 1914. In order to maintain a full compliment of line officers overseas, officers for the staff of these regiments and commands were drawn from units in the United States. In a report of 1915, Major General W. W. Wotherspoon, the Chief of Staff, estimated that slightly in excess of 28 percent of the officers of the line were absent from their commands due to detached service, leave or sickness. Because of the attempts to keep overseas units at full strength, "the percentage of regimental and company officers absent from their organizations is far higher for those organizations in the United States than the above percentages would indicate," he claimed.²⁸

The problem of absenteeism was not totally resolved by linear promotion and the filing of vacancies in the line, however. The increase in the number of commissioned officers and the filling of as many vacant positions as was possible might have imposed a sort of specialization on officers had not the act of 1901 provided for a system of rotation between the staff and the line, assuring that officers would be generalists, while opening the path to careerism. The unit cohesion and integrity attendant upon the old regimental system were sacrificed to some extent by rotation. As Secretary of War Jacob M. Dickinson pointed out in 1909, "there can be no doubt that the discipline

and efficiency of troops were lowered by the continued absence of many commanding officers and the resulting frequent changes of commanders."²⁹

Careerism was the most pernicious outgrowth of the system of rotation. In time the professional development of the officer corps became tied to a ticket-punching cycle of rotating positions with a turn at command as the desired goal. Rotation has remained an essential part of career management for officers until the present day. "The logic of rotation is powerful as a system for developing higher officers," commented one sociologist of the military not long ago. "Its [negative] impact on the system, however, is pervasive," he concluded, "since it forces the constant utilization of personnel who are new to their assignments."³⁰

Officers came, with great reluctance, to rely upon the noncommissioned officers they found on the job as they rotated through each of their new assignments. These noncommissioned officers helped provide the stability and flexibility needed by units between officer assignments and as new officers assumed their positions and commands. A random look at one coast artillery company between the years 1876 and 1906 underscores this point. During that thirty year period, there were seventeen company commanders, averaging only two years each in that position, while during the same period of time, there were only

eight first sergeants, each averaging four years, or twice the time of their company commanders.³¹

An untoward consequence of rotation was the development of an even greater distance between officers and men. Rotation robbed the service of "that cordial and quasi-permanent entente between officers and men, so necessary for contentment and discipline." As the officer became a more distant father to the common soldiers, the noncommissioned officer fell into the role of protective mother.³²

4. Status of Noncommissioned Officers

If the noncommissioned officer could not realistically hope for a commission during his term of enlistment, neither did his daily life offer the prestige given his European contemporaries. Poor pay, low social status, and a lack of respect and privilege were his lot.

Although an unbridgeable gulf separated the rank and file from the officer corps, within the enlisted ranks the republican ideal was pervasive. Each company was "in a certain way a Club," containing a body of obedient yet independent men, who were resentful of being patronized by officers or of "having any of their number too familiar with his officers." Therefore it was not uncommon for good men to shun promotion to noncommissioned officer.³³ What

Tocqueville observed as the 'unquiet passions' of Americans, "a restless disposition, an unbounded desire of riches and excessive love of independence," inhibited and proved insidious to the development and perpetuation of a noncommissioned officer corps in peacetime.³⁴ "It is the meanest position in which a man can be placed, that of non-commissioned officer," complained a newly promoted corporal of the 11th Ohio Volunteer Cavalry in 1865; "in our company, every man is smarter, knows more, and thinks himself a better man, than those under whom he is placed."³⁵

This republican predilection was most pronounced among the egalitarian volunteer units, quite naturally, as the men had lived in the same community before enlisting and often elected their officers and first sergeant. And it was reinforced by that remnant of faith in the common man so prevalent in early nineteenth-century America and the deep-seated Anglo-Saxon repugnance to a large standing army and to militarism, brought to these shores by the early English colonists. Volunteer nonprofessionals, or so the received wisdom held, would make short work of any war in which the nation might become involved. Senior noncommissioned officers of the Regular Army sometimes reacted to this lack of respect and privilege by using their fists rather than their heads, establishing themselves as petty tyrants, "almost always the men of

greater physical strength, able to quell a row by the 'knock down and drag out' style of business," noted the Army and Navy Journal in 1876. First sergeants seem to have been especially prone to such abuses.³⁶

If familiarity provides the breeding ground for contempt, this lack of respect should hold no surprises. There occurred a "promiscuous mingling" of noncommissioned officers and privates at the trader's store and in the common mess. Noncommissioned officers and reformers alike, suggested "separate messing and a distinct club-room or place of resort" for noncommissioned officers. They and their subordinates were often on a first name basis.

Private Brown is 'Tom' to Sergeant Jones, and it is quite a usual thing for Private Robinson to link his arm with that of Sergeant Smith, and say, 'Jack, let's go and have a drink.' And should Sergeant Smith accept the invitation, as he probably will do, they will find at the canteen sergeants, corporals, and non-commissioned officer of high and low degree mingling indiscriminately with privates, and a sort of hail-fellow-well-met understanding prevailing among all.³⁷

Therefore, with no special privileges and nothing to single him out except for experience and often merit, the noncommissioned officer had, as the only distinction between himself and his subordinates, "two or three stripes of colored braid on his sleeves."³⁸ The crux of the problem was both the bane of the noncommissioned officer and his virtue; his social origins were usually of the same social classes as those of the common soldiers he led.

This made all social distinctions artificial and noncommissioned officers tended to identify, if not openly sympathize, with the rank and file, turning the other way when men deserted, or by failing to enforce "a duty with which they are not in sympathy." While officers wished sergeants to be "a connecting link" between themselves and the common soldiers, "inspired with a feeling of sympathy with [their] officers in the promotion of discipline and efficiency among the men," reality was quite the opposite. Though his officers might lament his identifying too much with the rank and file, still they needed him to bridge the gulf of class between themselves and the common soldiers and to carry out their orders. As one critic has so aptly commented, the role of the noncommissioned officer has always been somewhat Miltonic: "explaining the ways of God to man, and man to God."³⁹

5. Nativity and Social Origins

The outstanding feature of American social composition and fabric is the result of immigration. Although our institutions are pragmatically English in origin and prejudice, the people who serve them are often of non-English ancestry. During the twenty years prior to the Civil War and the ten-year period after the war, no fewer than half of the men enlisted in the army were immigrants,

the Irish and Germans predominating.⁴⁰

The army has always been an employer of last resort and a source of opportunity to those unfairly dealt with in society-at-large. The pre-Civil War army on the frontier was full of men who had deserted either European society or that of the Eastern states. Many of these men were escaping business failure or were tradesmen down on their luck, mechanics, former journeymen frequently enlisting. Runaway apprentices were attracted to the expedient of enlistment.⁴¹ But the ranks held men of all sort and degree and station, many of whom enlisted under assumed names. The most competent rose quickly to the rank of noncommissioned officer and just as quickly passed back into civil life. A somewhat typical case was that of Private E. A. Perry, Co. 'H,' 1st Artillery Regiment. Enlisted in Boston in 1827, within two years he was appointed regimental sergeant major. That same year he obtained his discharge by providing a substitute, and resumed use of his real name, Edgar Allen Poe.⁴²

Frequent panics, such as those of '37 and '39, sent many good men into the ranks. An unofficial survey of one company in 1839 found that 9/10ths of the men had enlisted on account of "some female difficulty." Many had changed their name, and more than half claimed to have been at least partially drunk at the time of enlistment. A third of the company had been "men in elevated stations in life,"

lawyers, doctors, or ministers. Ten years later, in 1849, a company of recruits at Fort Leavenworth, Kansas, was observed to contain 'an Irish lawyer who had been compelled to leave his country after the riots of 1848, a broken down Englishman, a graduate of Dublin College, a draftsman, a man who had failed in business in Kentucky, and a Senator's son.'⁴³ And the 8th Infantry Regiment could boast "an ex-professor of geology of one of the foremost colleges in the world."⁴⁴

One such individual was Eugene Bandel. Born in Prussia in 1835 to a family of modest circumstances, he attended Gymnasium, and in 1853, immigrated to the United States where he joined his uncle in Washington, D.C. in order to learn the trade of locksmith. After an altercation with his uncle, he went West and enlisted in 1854. Within four years he was promoted to first sergeant, much further than he had "ever expected in view of the prevailing prejudice against foreigners, and in a country whose language I was first obliged to learn." After being discharged in 1859, he found employment with a federal arsenal, rising to master mechanic and, by 1872, superintendent of drilling operations.⁴⁵

During the Civil War more Germans fought on the Union side than any other national group, the next largest being the Irish, 187,858 and 139,052, respectively.⁴⁶ Agents for shipping companies solicited passengers in Ireland and

Germany by proffering the promise of enlistment bounties of several hundred dollars and, under a temporary law, automatic citizenship on discharge. Upon disembarkation at the immigrant-processing station at Castle Garden, New York, they found recruiting tents within a few yards of the exit.⁴⁷

The Germans were proud of their wartime service and maintained that "it was in the ranks, and in the non-commissioned officer corps, that their virtues were shown; steadfastness, discipline, endurance," principally. They saw their war record as underscoring, by comparison, the impetuous and undisciplined nature of native-born Americans, who were, as the Germans claimed, "unaccustomed to obedience and self-sacrifice."⁴⁸ General Sheridan and other officers took exception to this view, finding the Germans to be 'mechanical' and 'spiritless'. Although native-born Americans might be boisterous and difficult to control at times, these very qualities were indispensable in battle, or so they thought.⁴⁹

After the war, immigrants and those experiencing hard times, such as those brought on by the financial panic of 1873, continued to respond to the limited attractions of the frontier army. It was somewhat ironic that many Europeans emigrated in order to avoid conscription in the mass national armies of their own countries. A five-year term of enlistment in the United States Army offered them

the opportunity to learn enough English to get along and to get a taste of life in America.⁵⁰ The War Department even received an enquiry concerning the possibility of enlistment from a soldier in the Prussian army in 1872. But during the 1870s, the Irish were the largest group of foreign-born soldiers in the frontier army; 32 Irishmen died with Custer in 1876 at the Battle of Little Big Horn.⁵¹

Many noncommissioned officers were former Confederate or volunteer officers returned to service after failed attempts at business due to their restless nature. And if the diary of a bugler in the 7th Cavalry Regiment may be taken as typical of the 1870s, experienced men enough filled the ranks: "one printer, one telegraph operator, a doctor, two lawyers, three professors of languages, one harness maker, four cooks and bakers, two blacksmiths, one jeweler, three school teachers, also farmers, lumberman, peddlers, railroad men and day laborers."⁵² One sample of clothing issue forms for two companies of the 9th Infantry Regiment, dated 1874 and 1875, indicates that literacy for noncommissioned officers extended at least to the ability to sign their names with a steady hand, while about 10 percent of the privates had to use their mark.⁵³

The frontier army of the 1880s still contained more Irish than German immigrants. In 1881, the Irish and Germans together composed 65.5 percent of all foreign born

recruits.⁵⁴ But the German noncommissioned officer seemed to embody those characteristics that earned sergeants the reputation of being the 'backbone' of the army; "he was feared by the men, did not curry favor, but was rigid in carrying out orders," noted one officer of long experience. The Germans, when compared to other nationalities, usually chose enlistment only in default of civil employment, but once they joined the rank and file, their officers found them to "make very patient, subordinate, and trustworthy men." Although occasionally 'wrong-headed' they were never mutinous and only rarely disorderly.⁵⁵

As career noncommissioned officers, the Germans undoubtedly did little or nothing to inhibit the authority of the officer corps nor the power structure as they found it. In time they almost displaced the "old fashioned Irish sergeant reported to have been once so common, who had learned his duty in the British army, and who was a model non-commissioned officer, firm, self-respecting, narrow, opinionative," but who managed to survive in the popular imagination.⁵⁶ A poll taken in 1882 indicated that 16.4 percent of the noncommissioned officers of the army were Irish while 14.8 percent were German.⁵⁷

Actually quite a few of those old Irish sergeants were able to survive, but in some areas the Germans, of whom there seemed to be a disproportionate number of noncommissioned officers, predominated. A study made in

1889 of the nativity of the noncommissioned officers in the Division of the Missouri revealed that almost half of the noncommissioned officers were of foreign birth, Germans predominating (415), and Irish second (350), the total number of noncommissioned officers in the division being 2,541.⁵⁸ An army-wide poll of the following year found Irish noncommissioned officers still outnumbering those of German nativity, 16.3 and 13.3 percent, respectively.⁵⁹ "You must remember," wrote General Howard to a young man seeking advice as to an army career in 1889, "that many a young man from humble life, German, English or Irish, makes a capital non-commissioned officer."⁶⁰

The 1880s had its share of educated soldiers of American nativity, men of a higher social and economic status before enlisting. At Fort Lincoln, Dakota Territory, there was reported to be in 1880 "a respectable number of enlisted men fairly versed in the intricacies of algebra and geometry, with here and there one who had received a thorough education."⁶¹ In 1883 a soldier at Fort Douglas, Utah, reported in an army paper that the regimental drum major was a Harvard graduate and the first sergeant in one of the companies an influential Philadelphia businessman who had gone broke. "I could relate a hundred instances," he informed his readers, "of bright and intelligent men who have good connections and who have enlisted on account of family difficulties,

failures, etc."⁶² Yet with the exception of the occasional mechanic or clerk, most recruits continued to be from the ranks of unskilled labor.⁶³

The massive waves of German immigration ended by 1885 as Germany came into her own as a great industrial nation. American attitudes began to change as well; heretofore Germany had been a nation to be studied and emulated. Her system of education was envied and her modern, professional and successful army provided a paradigm of professionalism for reform-minded officers. Hereafter, Germany began to be perceived as an international rival and a potential threat. Combined with a growing nativist movement, the pressure of anti-foreign sentiment in general, and anti-German sentiment in particular, began to be felt within and without the service. In response to such feelings, the editor of the Army and Navy Journal tried to justify the inordinate number of foreign-born senior noncommissioned officers of the army: "It is very difficult to mould a native born American into a well disciplined soldier," William Church explained in 1888. "The foreigner...has more generally the instinct of military subordination strong within him, if not bright, is patient and plodding, and in our Army is bound to rise...."⁶⁴

In 1888, the Inspector General expressed alarm at the number of recruits of foreign birth, despite the fact that the percentage was smaller than in many previous years. He

recommended that a "strong effort" be made to enlist native-born Americans.⁶⁵ Secretary of War Stephen Benton Elkins encouraged the enlistment of youths from rural districts rather than from the floating population of the urban slums. According to Major William H. Powell, the recruit of 1889 was anything but ideal.

As a rule, the men we get in the army, owing to our present recruiting system, are not the young men who are brought up under home influence and training to obedience, as the case in our smaller towns and in the country; but they are generally from among the roughest element in our largest cities, having become rough from the fact that they would not yield to the influences of their original surroundings, and have run away from their homes to avoid the discipline there enforced, or are confirmed drunkards of uncertain age."⁶⁶

In order to recruit better men for the army, a basic ability to read, write and understand English was added to the qualifications for enlistment in 1891.⁶⁷ But it was the economic depression of 1893 that would provide the nativist enthusiasts with an immediacy for their cause. Recruiting stations were flooded with native-born Americans seeking to enlist, mechanics and mill men numbering among the usual unskilled laborers. So many tried to enlist that recruiting had to be stopped altogether for a time. Legislation preventing the reenlistment of privates with over ten years of service was passed in February, causing Adjutant General John Cunningham Kelton concern that the number of soldiers from which selection of noncommissioned

officers was made would be greatly reduced. Congress would rescind the act during the summer of 1894. Despite these limits on the reenlistment of long-service privates and a shortened enlistment, old soldiers still filled the ranks, however. Troop 'B' of the 7th Cavalry Regiment was known as the "soldiers' home" due to the advanced age of the men.⁶⁸

The reduction in 1894 of the five-year term of enlistment to three further limited the number of noncommissioned officer candidates in the line. In response to the nativist demands for an end to Eastern European immigration, Congress enacted a law which confined enlistments to citizens, or to those who had made legal declaration of their intention to become citizens, all of whom had to be able to speak, read and write English and be thirty years of age or under. Only Indians were exempted from this law. Given the consequent increase of native-born Americans seeking enlistment, the army found no fault with the legislation.⁶⁹ During 1895, 7,780 men were recruited, of whom 5,518 were native born and 2,262 foreign born. More than half of those who sought enlistment were rejected, either for lack of physical, educational or other qualifications.⁷⁰

If the pool from which noncommissioned officers were chosen had been drained of a large number of soldiers of foreign nativity, foreign-born privates and noncommissioned

officers already in service were protected from any ill affects of the law. An army circular published two months after the law went into effect assured men already upon the service that although they were not "the class of men now wanted for the service," they could be reenlisted if their service had been "honest and faithful."⁷¹

There was some irony in all of this. A War Department survey in 1894 found that there were in the army a larger percentage of native-born Americans than ever before, more than 75 percent, while the percentage of soldiers of foreign nativity was the lowest ever, only 25 percent. The number of alien noncommissioned officers was about 22 percent.⁷² In the same year, from a study of records of statistics concerning desertion, it was deduced that the "majority of those who desert and are confined at Leavenworth are first in number American (over 73 percent); second, Irishmen; third, Englishmen; fourth, Germans; fifth, Swedes."⁷³

Perhaps the ultimate irony involved the tension between the professional admiration of the officer corps for the German army and the fear of a 'Pan-Germanic' loyalty within the enlisted ranks of the United States Army. After the successful war with Spain, some officers began to predict a contest on the horizon with Germany, a nation then bent on becoming a world naval power. When General Arthur McArthur expressed such a view he

indiscreetly noted that this Pan-Germanic sentiment had so seized upon German-Americans that a German name in the regimental lists was a curiosity. The enraged United Societies of Indianapolis, conscious of a large German quota sent by them to the Spanish American War, brought the incident to the attention of the 'Deutsch-Amerikanischer National Bund.' As a result of a subsequent investigation, the accusation was proven false. Yet the law of 1894 had its effect, and by 1903, the Army and Navy Journal could characterize as "the most inexplicable of European fallacies," the foreign belief that the United States Army was composed of many immigrants.⁷⁴

6. Calls for Reform

In 1876 Captain Oris W. Pollock, 23d Infantry Regiment, proposed to Congress, through his chain of command, that the pay of noncommissioned officers be nearly doubled by way of a diminution of the wages of two dollars from the monthly pay of each private soldier. While his immediate commanders approved, Generals Sherman and Sheridan forwarded them "disapproved." Although such a scheme would have only cost the government but \$80 per month in pay of each regiment, it was not acted upon. The Congress had decreased the pay of private soldiers from \$16 to \$13 in 1871, and, as a consequence, desertion

skyrocketed, decreasing only after the Panic of 1873.⁷⁵

The Army and Navy Journal editorially championed the plan and disparaged the consequences of the insignificant pay given to the noncommissioned officers of the army. It was the lack of a meaningful difference of pay between the sergeant and the private, along with the considerable difference in pay between the noncommissioned and the commissioned officer, that "marked the great gulf that divides the whole class of enlisted men from the 'commissioned' class," in the editorial opinion of the journal. The well-paid noncommissioned officers of the English army were reportedly everything those of the United States Army were not. As for educated men who were qualified for promotion, the editor lamented their absence from the ranks of the noncommissioned officer corps:

The possession of education by a man in the ranks is to-day a positive disadvantage to him. He is almost certain to be detailed as a clerk, and once there he sticks there, and finds the line of promotion practically closed. A young, ambitious, well-educated lad stand little chance of advancement in our army.⁷⁶

Until 1885, the only retirement due a veteran of twenty years' service with the Regular Army or a disabled enlisted man was admission to the Soldiers' Home in Washington, D.C. Established in 1851, this institution was unpopular with soldiers as it was financed by the men themselves through fines, stoppages, forfeitures, and a 12-1/2 cent deduction from their monthly pay.⁷⁷ From the

1880s, benefits and perquisites for noncommissioned officers became a cause with reform-minded officers.

Congress was encouraged by an editorial in The United Service magazine in 1880 to establish a retired list of noncommissioned officers with thirty or more years' service.

The importance of the class [of noncommissioned officers] in the service has never been full recognized in the laws relating to them...[and as] it has been repeatedly decided, both at home and abroad, that the discipline and efficiency of an army depend largely upon its non-commissioned officers...Liberal pay and proper consideration for their rank should be given to them while in service...but an official rank, with an assured pension for their old age, after having given the best years of their life to their country, and when they are unfitted for engaging in ordinary business occupations, will do much more towards reconciling them to remaining in it for life.⁷⁸

In 1882, another editorial urged the Military Committee of the House of Representatives to provide noncommissioned officers with a retirement on three-quarters pay, as was done for commissioned officers. As a rationale for such legislation, the editorial cautioned that without noncommissioned officers, there would be, in the army, "a loose assemblage of parts. There is, and must be between the officer and the private a distance and degree of reserve, that in the absence of some intermediary would tend constantly to weaken the mutual confidence which if necessary to effective action." The editorial ended by

remarking on the "indispensability of the non-commissioned officer as a component part of the military body."⁷⁹

In the United State Army, there was, from the perspective of all ranks, "socially, an impassable gulf between the enlisted men and their officers."⁸⁰ No law or regulation dictated this arrangement, rather it was a custom inherited from the English model. The officer corps' self-serving defense of this caste-like system to civilians rested on the 'protection' it gave the common soldier against the possibility of favoritism. Furthermore, such social distinctions were found in civilian society as well.⁸¹

Given social division, combined with the need for officers in a 'modern,' professional army to be concerned with the morale of the common soldiers and to monitor that morale on a daily basis, the need for an intermediary, interpreter and buffer, indeed, a sort of 'middle manager,' became obvious to some in order that "a just equilibrium" might be maintained.⁸² Thus the great concern for the welfare of noncommissioned officers in general and first sergeants in particular, stemmed from the reformers' belief that noncommissioned officers were "a connecting link between the officers and the private soldiers." Therefore, noncommissioned officers needed to be "inspired with a feeling of sympathy with the officer in the promotion of discipline and efficiency among the men, instead of...being

in sympathy with the men,...shielding them from just punishment, conniving at desertion and all manner of breaches of discipline."⁸³

The importance of the noncommissioned officer as the military equivalent of the industrial foreman, supervisor and specialist became increasingly obvious. First sergeants of fifteen years service might make four times their army pay as "foremen and superintendents in large manufacturing establishments in eastern cities," in the 1880s. "Where, in civil life," asked an artillery officer in 1904, "can a private secretary be obtained who can be trusted with all the details of a complex organization, or the most confidential matters of his employer," at the pay given a regimental sergeant major? "Or where can a superintendent of a warehouse...be obtained in civil life, at the same compensation" given a post quartermaster, commissary or ordnance sergeant?⁸⁴ Congress would turn a deaf ear to such proposals until 1908, when relief was given noncommissioned officers of the line and the staff as the first new pay rates for enlisted men since 1872 were authorized.⁸⁵

If being a member of the noncommissioned officer corps of the United States Army did not bring the rewards of social status or mobility, fair pay, and an honest pension, neither did the position elevate a soldier educationally. Unlike the armies of Europe, prior to 1878, noncommissioned

officers were not required or often encouraged to attain even the rudiments of a common school education. And as a professional or technical degree of education must be predicated upon the possession of at least a primary education, what little of such education existed in the army was beyond the ability of many noncommissioned officers to acquire.

After pay and privileges, education for noncommissioned officers became an important element in the program of the reformers. They sought to establish compulsory primary education for these men and to make it a prerequisite for their promotion. Courses of study in professional, technical and specialist subjects were seen as essential to a modern military establishment. Frustrated with the failure of the War Department bureaus and the Congress to share their views, reforming officers sometimes took the initiative by establishing their own courses with the limited means available to them.

Furthermore, education clearly became, in the eyes of the reformers, the basis upon which the elevation of the status of the noncommissioned officer would be built. Increases in pay, privacy, pension and privilege would be mere ornamentation and hollow gestures without the noncommissioned officer being more intelligent and better educated in both the general and professional branches of knowledge than the common soldier. And if the senior

noncommissioned officer was to become the middle manager needed, his status would have to be appreciably increased, while the convivial familiarity with the common soldiers and the attendant strong identification with their interests would have to be replaced by an identity with those of his officers.⁸⁶

The education of noncommissioned officers was, in the first instance, 'self-education,' or as the soldiers were wont to say, 'booking.' The subjects to be 'booked' were the tactics and regulations. The few manuals prepared especially for the noncommissioned officer were usually printed privately. Hints for Non-commissioned Officers on Actual Service, compiled and translated from the German by a Colonel Sontag, a volunteer officer, appeared in 1812. In 1864, Customs of Service for Non-Commissioned Officers and Soldiers was published by Captain August V. Kautz, an officer in both the volunteer and regular forces. An immigrant from Baden, Germany, whose family settled in Ohio, the West Point-educated Kautz would become a strong proponent of the formal education of noncommissioned officers.⁸⁷

The most convenient means available to those noncommissioned officers who wished to supplement this self-education were the post libraries and schools, organized by paternalistic officers with the betterment of the common soldiers in mind, rather than that of their

noncommissioned officers. And so the sergeants were asked to sit down with the common soldiers, their subordinates, and struggle with reading and ciphering. As time went on, courses in professional subjects were organized for noncommissioned officers in the evening, an unattractive end to the duty day. Any examination of the education of noncommissioned officers, however, must begin with those facilities found at the hundred-odd posts at which they were stationed: the post libraries, reading rooms, and schools.

II

POST LIBRARIES AND SCHOOLS

1. Libraries and Reading Rooms

The establishment of reading rooms in companies and regiments was an early innovation of paternalistic commanding officers. They early-on tried to persuade the War Department to establish such facilities at all principle barracks, and it was perhaps wishful thinking, when in 1838, a commercial military journal informed its readers that assurances had been received from the "authorities" that such rooms would be established as a matter of policy "and that the Secretary of War will undertake to supply the books."¹

Nothing of the sort occurred, but commanding officers continued to provide such facilities for their men. Even units on the frontier indulged this perceived need for off-duty reading. In 1853, while at Fort Leavenworth, a major in the 2nd Dragoons led off with a subscription of twenty-five dollars to order the portable 'Harper's Classical and

Family Libraries.' The first sergeant and another sergeant subscribed the same, then calculated the percentage owed by each man proportional to pay. Most of the men signed immediately, "and the library was assured with scarcely an effort," recalled the first sergeant.² A utilitarian "curricula" for the self-study of European and American writers, the Harper's series was widely found in civilian households, libraries and churches. Company commanders saw the virtue in such "well-selected books" as something to occupy and entertain their men when off duty and to keep them "about their company quarters."³

Army Regulations gave some small encouragement to commanders in 1861 by providing for the establishment of a post fund to be financed from the savings of the soldiers' flour ration by baking their bread at a post bakery, along with a tax on the sutler. Libraries were specified as one of the activities to be financed by this fund.⁴ Critics pointed out the ironic situation in which the soldier was thus placed, that of being forced to improve his mind at the expense of his stomach. "The United States government," complained one soldier, "ought to be well able to afford to do something for the education of the enlisted man without making him pay for the same."⁵

Libraries established by companies and regiments were of varying quality and design. In the early 1860s, Fort Laramie, Wyoming, boasted a 'Soldiers' Reading Room'

furnished and provided with subscriptions to the major newspapers and magazines published in the United States, all at the expense of the commanding officer of the 11th Ohio Volunteer Cavalry, whose regiment was stationed there throughout most of the Civil War. The fort also contained a library numbering between four and six hundred volumes. These books were circulated among distant posts and exchanged in the manner of a traveling library system.⁶

In 1870, at Ringgold Barracks, Texas, each of the four new company barracks contained a reading room. The post library was in a small brick building containing about 500 volumes, and received "most of the leading periodicals of the day."⁷ The library at Fort Buford, Dakota Territory, held 366 volumes, "principally light reading." According to the diary of an assistant librarian at the fort, between April 3, 1874 and May 7, 1875, he issued an average of sixteen books per day to soldiers of his regiment, the 6th Infantry.⁸ At Fort McPherson, Nebraska, in 1875, it was reported that there was no post library, but rather, two company libraries, one containing 362 volumes, and the other, 26 volumes.⁹ About 1879, a post as far west as Fort McKinney, Wyoming, operated a library from a post fund provided by the sale of surplus flour and bakery goods.¹⁰

The combination reading room and library at Fort Stevenson, Dakota Territory, was 20x40 feet, containing some 850 volumes, which included works on physical

sciences, travel, biography and poetry.¹¹ The commanding officer of the 21st Infantry Regiment, Vancouver Barracks, Washington Territory, included a library in the new canteen.¹² The 'library' at Fort Sidney, Nebraska, used to be a ward of the old hospital and contained no books "except a number of small volumes which contain the Bible, taking them all together," but subscribed to many periodicals to include, Harper's Monthly, Scribner's, The United Service, Frank Leslie's Popular Monthly, Frank Leslie's Illustrated Weekly, New York Herald, Army & Navy Journal, Chicago Times, and the Omaha and Cheyenne papers. Upon completion of the new post hospital in 1882 at Fort Yates, Dakota Territory, the old hospital was turned to use as adjutant's office, post library, and reading room. Characterized as excellent, it contained 1,000 volumes. Even Fort Supply, Indian Territory, had a library "of many volumes of all classes of books and periodicals," in the mid-1880s.¹³

In his annual report of 1877, Secretary of War McCray linked the lack of intellectual stimulation at isolated posts with the high rates of desertion, and recommended the supply of more and better reading matter to such posts. In his annual message of the same year, President Hayes asked Congress to provide the army with "a more abundant and better supply of reading matter." But not until two years later was Quartermaster General Montgomery Meigs finally

authorized to supply books, newspapers and periodicals to the post libraries. Lack of funds would limit the effect of such good intentions.¹⁴

The next year, Meigs was replaced by Colonel Samuel B. Holabird. Holabird saw the libraries and reading rooms as a relief from the monotony of garrison life and wished to see at all permanent posts, of which there were approximately 100 at the time, small libraries of books, including those giving useful information, as well as works of fiction, stories, or those intended solely for amusement. Holabird wanted books that would be educational, whereas an inspection of most libraries would find works that would be considered as 'morally uplifting.' "It is useless to try to have a collection of all dry-as-dust books and religious writings," argued the new Quartermaster General. "...\$500 or \$1,000 worth of books for each post to begin with, and small yearly additions by gifts, subscription, etc., would accomplish most useful results," he predicted.¹⁵

Such libraries as already existed belonged to the various companies and regiments and tended to follow them on their frequent changes of station. When a regiment dispersed its companies to different stations, books might be distributed to each by shares through a lottery.¹⁶ Such frequent movement contributed significantly to their deterioration.

It was not until 1879, however, that the War Department finally authorized each post to maintain a library. A two-story brick building for a library of three or four thousand volumes, along with reading and class rooms, was built for the enlisted artillerymen of Fort Monroe, Virginia, in 1880.¹⁷ By the end of 1881, fifty-two chapels and reading rooms had been built. In an army numbering just over 23,600 enlisted men for the years 1881 and 1882, daily attendance upon the reading rooms was estimated to be about 4,800 and 4,375, respectively. An editorial in The United Service predicted that "a noticeable improvement in the mental, moral, and physical tone of our frontier garrisons," would result from the construction of such facilities.¹⁸

That libraries containing "books of reasonable interest" were popular with soldiers was nothing peculiar to the military. Self-help through the medium of the printed page enjoyed widespread popularity in that era. In the civilian sphere, community libraries and reading rooms became centers of self-education and entertainment for working men and women, whether mechanics or clerks. Between 1850 and 1875, 257 public libraries were established in the United States. That literary associations flourished among the troopers of cavalry regiments was more a reflection of the popular culture of the times than an indication of any scholarly pretensions

on the part of the soldiers, a few Harvard graduates excepted. The publishing firm of J. B. Lippincott & Company advertised in the pages of The United Service such self-help titles for post libraries as The Primer of Politeness, How to Write English, Home Gymnastics, Walker's Hand-Book of Object Lessons, and books on such topics as natural philosophy and astronomy.¹⁹

Holabird retired from active service in 1890, but not before establishing a library for the use of recruits at Jefferson Barracks, St. Louis, Missouri, as a result of a scandal concerning their maltreatment the previous year by their noncommissioned officers and, shortly thereafter, seeing the abolition of the unpopular post and regimental funds. The Quartermaster Department had taken over the purchase of books, periodicals, and newspapers for the post libraries the year before. In 1891, Secretary of War Redfield Proctor observed that the collections of books "dignified by the name libraries, consist mainly of odds and ends in a more or less dilapidated condition, the result of much handling or being heirlooms from abandoned military posts." In view of "improving the morale of the Army," he recommended an annual appropriation of \$25 per company, for the purchase of interesting as well as instructive and profitable reading." And yet, by 1897 a third of the posts reportedly still had no libraries.²⁰

2. Chaplains

That 'dry-as-dust' religious tracts were commonly found in the soldiers' libraries should come as no surprise as the original impulse to paternalism was the need to improve the moral quality of life for the common soldier. In fact, there developed a very close relationship between paternalism and religion in the army. Chaplains were not assigned to regiments but to departments and then assigned by each department commander to posts where the need appeared greatest. Between 1865 and 1898, legislation limited the number of chaplains at thirty to minister to the thirty-six white regiments then in service.

As few posts had chapels, divine service was often held in the library. Few soldiers would normally attend, thereby rendering the size of the quarters moot. While the chaplains organized Sunday schools and Sunday school libraries for the families of soldiers and their dependents, they were often given additional duty assignments as post librarians.²¹ But the main problem for chaplains was their having to "depend entirely on the goodwill of the post commander to obtain a tent or barrackroom in which to gather the garrison for worship - they have to make straw out of bricks," as one chaplain wryly noted.²² At Fort Union, New Mexico, in the 1860s, the chapel was housed in the building of the Sons of Temperance, while a

school room at Fort Supply, Indian Territory, and an abandoned hospital at Fort Bayard, New Mexico, served the purpose during the 1880s. As late as 1904, the badly located and unattractive library at Fort Thomas, Kentucky, was the scene of services.²³

Paternalistic commanding officers used their chaplains well and tried to provide adequate facilities for them. Major Verling K. Hart, commanding officer, Fort McKinney, Wyoming, requested an allotment of fifteen hundred dollars in 1879 in order to construct a combination chapel, school, and reading room. His application refused, other rooms were put to the task, and the chapel was never built. Disinterested commanding officers found the libraries a ready source from which to 'requisition' "whatever could make life pleasant" for themselves. Such officers were eventually restrained by regulation from removing any newspaper or periodical from the library, it being made clear that such material was furnished for the use of the enlisted men.²⁴ But God help the chaplain without a reformer for a commander.

While the paternalism of commanding officers brought enlisted men the benefits of recognition for meritorious deeds, a concern for their welfare through temperance societies, canteens, and gymnasiums, and the provision for their informal education through libraries, reading rooms, and literary societies, the paternalists sought their

intellectual self-improvement by more formal means. If paternalism was to truly function, enlisted men needed skills for self-improvement. If they were to respond to incentive and to be reasoned with, they had to be able to reason. They would need the benefits of formal education, and in the last quarter of the century, education itself became an incentive. Education became, in fact, the motive force behind the paternalist model.

3. The Post Schools

Before the Civil War, the idea was common that "an uneducated man made as good, if not a better, soldier than the educated man." Regular army officers, in particular, seemed to see the uneducated soldier as more adaptable "to the discipline of the camps," and more receptive to direction and orders.²⁵ Legislation of 1838 allowed posts to hire civilian chaplains who would, among other things, act as schoolmaster. However, the intention of the law had more to do with the education of the soldier spiritually than mentally and to that end was it carried out.²⁶

The Civil War gave cause for the need of literacy on the part of the soldier and began a debate as to how far his education need extend. Wartime regulations authorized a chaplain for each regiment and thirty more to serve as

post chaplains. These post chaplains were to "perform the duties of Schoolmaster." Chaplains throughout the army found themselves ministering to the minds as well as the souls of the soldiers.²⁷ The large number of volunteer units contained men with varying degrees of a common school background. One Union Army chaplain characterized the educational background of the troops in this way:

A very large majority of the soldiers born and brought up in the Northwestern States...could read and write, but of these many could read but very imperfectly, and composed a letter with great difficulty. Union soldiers from the slave states were deplorably destitute of common school education. Thousands of soldiers learned to write letters while in the army. In my army Sunday-school of 150 to 250 from my own regiment, I found a large number were poor readers. They were very imperfectly taught in the common schools. The same I found true of schools in other regiments. The letter writing showed that the writers were very imperfectly instructed in orthography. The average age of the soldiers I met, was certainly under 30 years. In a word, our soldiers show that a great improvement is needed in common schools.²⁸

The common school movement was well established by the last half of the century and the common soldier's need for such an education began to be appreciated by Congress, the War Department and the paternalists within the officer corps. When, in 1866, it was found difficult to secure enlistments for the army, Secretary of State Charles Sumner proposed that at every army post and garrison the officers should teach the men the rudiments of education. Sumner

who, according to Senator Nye, had a habit of reading letters in support of his positions on the floor of the Senate, read a letter from Major General Lew Wallace in which he argued in favor of educating every fighting man. The legislators were reportedly most impressed with the letter.²⁹

By act of July 23, 1866, the Congress required the maintenance of school facilities for enlisted men at all permanent stations without, however, specifying a means for providing that education. In September, the War Department issued general orders requiring the Quartermaster Department to build chapels, reading rooms and school rooms where space allowed.³⁰

It was the advocacy of education by reformers who sought to uplift the lives of the soldiers morally that gave the greatest, if not the most lasting, impetus to the establishment of education for enlisted men of the army. Indeed, in proposing the original act of 1866 which created the post schools, Representative James A. Garfield of Ohio, a member of the Military Affairs Committee, had just that end in mind. In support of the proposition, he argued that education would give relief from the 'evil of idleness,' that greatest scourge to the soldiers' lives, in the opinion of many officers:

One of the greatest evils known in the standing armies is the evil of idleness, the parent of all wickedness, and especially the ignorance connected with it.

I hope we shall be able to do something to make it a patriotic army. In the wearisome months spend in camp and at posts and garrisons, there is nothing for the soldiers to do but to indulge in some deviltry. It is a great evil in the army. I want the enlisted men to have opportunities for culture; and I ask that the Secretary of War shall detail officers fitted for that purpose.³¹

Garfield, only thirty-five years old when he introduced the legislation in May of 1866, was a long-time friend of education. Fatherless from the age of two, Garfield's early education was accomplished in alternating periods between hard manual work as a farm hand, driver, and deck hand. At eighteen he studied Latin, Greek and algebra at the Geauga Seminary at Chester, Ohio. While a student at that institution found by Free-Will Baptists, he had a conversion experience which led him to seek membership in the equalitarian and democratic Disciples of Christ, the frontier church which his parents had joined years before, having forsaken their New England Calvinist heritage.³²

In 1851, he enrolled in the Western Reserve Eclectic Institute at Hirma, Ohio, and in 1854, entered Williams College, Massachusetts, from which he graduated with high honor in 1856. While at Williams College, he taught in a one-room school in Eagle Mills, New York. He returned to the institute at Hiram to teach Latin and Greek, and the next year was elected its president. Garfield spent the pre-war years reading law, preaching as a lay evangelist

for the Disciples of Christ, and as an active member of the Ohio Republican party. During the war, Garfield served as one of the more competent 'political generals,' rising from the rank of lieutenant colonel to that of major general of volunteers.

Education was prominent in Garfield's mind while he served in the House. In support of a memorial to Congress from the National Association of School Superintendents that a National Bureau of Education be established, he presented the memorial and bill in the House in 1866, served as chairman of the special committee, reported the second bill, and defended it on the floor.³³ The next year the bill became law. In proposing the education of enlisted men of the army in 1866, other than the discipline of the soldiers, he had a personal idea in mind; short of his dream that "every man and woman in the United States should study American history through the period of their minority," by law, his bill would, "enforce it to some extent upon the privates in our army." At the close of his life, he recalled the post schools as "one of my things."³⁴

Yet the soldiers' lack of a proper common school education could not be rectified by simple legislation. Implementation would depend upon the cooperation of commanding officers. Reformers were few and the demands of army life, particularly field service, many. Given these demands on the soldier's time and the parsimonious nature

of the Congress, only the most aggressive of the paternalists might implement the educational policy.

At Fort Laramie, on the frontier, soldiers were allowed to attend a night school in the facility used by their children during the day. At Willets Point, the post in New York Harbor occupied by the Battalion of Engineers, the commanding officer of the battalion, Major Henry Larcom Abbot, immediately complied with the order by opening a school for enlisted men. Abbot's educational regimen was exceptional and the school continued until his reassignment in 1886. The technical proficiency required of the Engineer Corps' noncommissioned officers necessitated a common school education for them and private soldiers who aspired to promotion as well.³⁵

As for the line of the army, many of the junior noncommissioned officers, although functionally illiterate, could perform their duties, but first sergeants, quartermaster sergeants and sergeants major had need to be quite literate by virtue of their duties, i.e., keeping muster rolls, unit accounts, unit returns, and property receipt rolls. Senior noncommissioned officers of the new black regiments, however, were often illiterate, causing the white officers to keep the records themselves with their own hands and aid the first sergeants in taking the roll. The post schools were enthusiastically received by these officers. Black noncommissioned officers at Forts

Davis and Clark, Texas, were required to attend the post schools.³⁶

Yet few commanding officers encouraged the education of their noncommissioned officers at the schools. Colonel William Babcock Hazen, the stiff-necked commanding officer of the 6th Infantry Regiment, held evening classes for noncommissioned officers in the 1870s at Fort Buford, Dakota Territory. Hazen and Garfield were old friends, both having attended the Western Reserve Eclectic Institute as boys in Hiram, Ohio. They were of the same mind as to the benefits of a common school education for all soldiers. Aside from such notable exceptions, however, the law of 1866 remained a dead letter until 1878. "The Army is not, as a whole, alive to the subject of education," concluded the Army and Navy Journal in 1873. "Now, during my ten years' service," wrote a noncommissioned officer in 1879, "I have been as much as three consecutive years at one post - a large post at that - and I have not seen any sign of that benefactor of the human race, the school master."³⁷

It was George Gatewood Mullins, the white chaplain of the black 25th Infantry Regiment, who having discovered the existence of the education law of 1866, began to make demands upon his commanding officer and the War Department that its terms be carried out. A native of Kentucky, Mullins held a masters degree from the University of Kentucky and was a Disciples of Christ minister. After

appointment as chaplain in 1875 at Fort Davis, Texas, he set about re-establishing the defunct school. The fact that ten percent of the command was in the guard house, together with other problems he encountered daily, led him to believe that there was little to recommend the black man for military life, and to even consider resignation. Yet Mullins would soon have sixty students, more than a quarter of the garrison, in attendance at his classes, which met between 7:30 and 8:30 each week night.³⁸

By 1877 he was able to discern a change in the conduct of the men which he attributed directly to his educational efforts. Mullins convinced the post commander that school needed to be compulsory for all noncommissioned officers and privates, and began teaching three well-prepared classes each day, five days each week. The post commander even ordered company commanders to so arrange the soldiers' regular military duties so as not to interfere with classes. Mullins kept him informed of attendance and the deportment of his scholars on a daily basis.³⁹

In tones that harkened back to the pre-Civil War notion of a 'benevolent empire,' Mullins used the tactic of moral suasion not only upon his students but with his superiors, as well. Evening lectures on moral law, Sunday school, morning and evening services and classes geared to the educational level of each class of students resulted, in Mullins' estimation, in their acquiring a sense of

dignity, accomplishment, and self-esteem.⁴⁰ In a period of fifteen months he had become so convinced of the relationship of good discipline and morality to education that in his report of a visit to Fort Bliss, Texas, he requested that a chaplain be posted there, "for the sake of the moral and mental welfare of our poor men since a good Post School, and regular Divine Service act powerfully to keep men out of the guard house and from courts martial, and particularly help develop a higher type of soldier."⁴¹

Mullins' work with the education of soldiers in his regiment, his reports to the War Department, and the report of Colonel Nelson Henry Davis, Inspector General, of his observations of Mullins' classes during a tour of inspection in the Department of Texas, revived the act of 1866 in the minds of senior officers at the War Department. This renewed interest in education led to the convening of a board by Secretary of War James Donald Cameron on December 31, 1877, to consider the establishment of schools at military posts.

It was Cameron's successor, George Washington McCray, Secretary of War from 1877 until 1879, during the Hayes administration, who received the board's recommendations and oversaw their publication and implementation as General Orders 24 in 1878. Educated at regional schools in the new state of Iowa, McCray had worked on a farm in order to earn enough money to attend an academy. He later taught in a

country school at the age of eighteen. As Secretary of War, he took a special interest in education.⁴²

In accordance with General Orders 24, attendance at post schools was to be voluntary for enlisted men but compulsory for children. An officer would be detailed to visit and inspect the schools and make regular reports to the War Department. And enlisted men, to number one for each fifteen pupils, were to be detailed as teachers with extra duty pay of 35 cents per day as was the case with mechanics and artisans, and to be called 'overseers of schools.' All officers were instructed to cooperate in the encouragement of study and the promotion of learning among the soldiers.⁴³

Furthermore, the order expanded the basis of the post fund, from which the post school, library and reading room were to be maintained, by the imposition of a tax on the post trader of ten cents per month for each officer and enlisted man serving at the post. This was in addition to the money saved from the operation of the post bakery. The War Department further specified that the Quartermaster Department was to be responsible for the construction of schoolrooms, libraries, reading rooms, and chapels, and was to supply them with chairs, tables, desks, lamps, and bookshelves, in addition to fuel. The post fund was to be used for the purchase of books and instructional materials. President Hayes encouraged Congress to make a "liberal

appropriation for the erection of buildings for schools and libraries at the different posts," in his 1878 annual message. An allowance for text books, maps, globes and supplies would not be forthcoming until 1890, however.⁴⁴

In practice, the officer detailed as superintendent of the post school became the post chaplain. And this duty was in excess of such others as post librarian and treasurer, in which capacity he also supervised the post bakery, managing it so as to produce the most possible savings from the sales of bread and from saving flour. Being assigned as chaplain to one of the four black regiments often incurred additional duty assignments. Depending upon the availability of officers in those regiments, chaplains might find themselves assigned as quartermaster, commissary, signal, engineer, ordnance, exchange officer, or any combination thereof.⁴⁵

The chaplain was in the curious position of being a commissioned officer yet not a member of the profession of arms. His ministerial duties, both spiritual and educational, required that he have the confidence of the soldiers. This was an impossibility if he maintained any intimacy with their officers. A successful chaplain needed to be independent and to sacrifice much. Chaplain Mullins seems to have been such an individual. Many of his fellow chaplains, unfortunately, did not prove up to the task.⁴⁶

The 'teeth' in any army order is provided by the

ability to inspect. The seriousness of the War Department might be seen in the assignment on October 11th of General Sherman's aide-de-camp, Colonel Alexander McDowell McCook as visitor and inspector of post schools with the title of 'officer in charge of education in the Army.' He promptly addressed circulars to the various military posts and stations affected by the order to ascertain what progress was being made and to encourage them to put the system into operation if they had not already done so. At Fort McKavett, Texas, while on a tour of inspection, he found that soldiers "whose early education had been neglected, were glad to avail themselves of the proffered instruction."⁴⁷

Nevertheless, the follow-up circular sent out by McCook returned with disappointing responses, including almost every imaginable reason or excuse for noncompliance. General Orders 24 received a mixed response. Many commanders were very unhappy with this new change. Others requested clarification. A few welcomed the order. Major Hart, for example, opened a school at Fort McKinnery in 1879, and classes were organized at Fort Monroe the next year. Evening classes for enlisted men at West Point were very large.⁴⁸ But the reformers were much pleased as this wishful editorial in The United Service expressed:

It is gratifying to be able to state that as a rule, the soldiers have gladly availed themselves of the educational facilities afforded them, and have generally made the

most satisfactory progress in their studies....[The program] has already proven successful beyond the most sanguine expectations, the men generally taking a degree of interest in the matter which is scarcely anticipated.⁴⁹

Such optimism was inconsonant with reality, however. Colonel McCook's consolidated report to the Secretary of War for the month of October, 1879, claimed that only 692 of the 24,474 enlisted men of the army were in attendance at the schools. He further reported that classes were not being held at a number of posts due to the impossibility of obtaining teachers. McCook recommended that a proper number of teachers be enlisted with the rank and pay of commissary sergeants. Commissary sergeants were noncommissioned officers assigned to posts and not to units. They remained at their posting and reported directly to their bureau chief at the War Department on the supplies and equipment under their charge. McCook further proposed that such noncombatant schoolmasters serve also as post librarians and be responsible of the care and preservation of the property and literature sent the posts for use at libraries and schools.⁵⁰

By 1880 there were reported to be only 78 schools in operation. The next year, the attendance upon these schools was reported to be but 912 of the 23,661 enlisted men in the army. Attendance almost doubled in 1882, however, when the order's revision required educational opportunities for soldiers to be specified, while officers

were directed to encourage attendance, and to provide the necessary opportunity. The curriculum was elemental; reading, writing, arithmetic and a little geography and history being its substance. The revision also addressed the problem commanders faced when both white and black units were garrisoned at the same post by specifying that there be separate facilities: "If the command consists of white and black troops, it necessitates two schools or two separate rooms." The schools for blacks were to be "equally well fitted up and as comfortable as the room used for the white soldiers."⁵¹

McCook had requested that Mullins be detailed as his assistant and, in February of 1880, the chaplain assumed his new assignment. Upon McCook's being ordered to assume command of the 6th Infantry Regiment on December 15th, Mullins was selected to succeed him, and in April of 1881, he took charge of education in the army. The United Service editorially rejoiced in his appointment. In his new capacity he initiated additional policies to upgrade the quality of education at the post level. Standardization of textbooks and subject matter began. Inspectors were ordered to include the post schools and its facilities in their reports, and eventually each geographical department was required to make an annual report on the situation at each school.⁵²

Mullins' appointment, unfortunately, would prove to be

a small splash in a large pond. The superintendent of the Military Academy at West Point, General Oliver Otis Howard, a man considered by many as the best friend of education in the army, was not even aware of the appointment. Mullins was given assignments outside of his position, as well. Such was the case when in 1882 he was directed to report in person to the assistant commissary general of subsistence at St. Louis, to aid in the distribution of supplies to flood victims.⁵³

The zeal of Chaplain Mullins for both his position and the creation of an education bureau earned him the distrust of Adjutant General Richard Coulter Drum, a man, it could be argued, far more powerful than the commanding general. Drum was thoroughly against the use of the chaplains as superintendents, teachers, and particularly as officer in charge of education. The whole situation threatened, in Drum's view, "to create a bureau of military education," a situation he found most objectionable, for despite their "laudable zeal in this work," he expressed serious doubt that their efforts could "ever be productive of the greatest good."⁵⁴

Mullins' successor, Chaplain George Dauchy Crocker, was quite his opposite. Lacking Mullins' fervor, he simply maintained the office. For instance, when he was applied to in 1886 by a post chaplain, "for printed matter and further instructions," Crocker responded that "there was nothing

except the regulations," and that furthermore, his "duty was to receive only reports, consolidate them and send them to Washington and nothing more." Crocker was succeeded by Chaplain George P. Robinson, the last to serve in that capacity as the office was abandoned in 1889 and the 'responsibilities' it entailed were given to the Assistant Adjutant General in each Department, while inspections were to be made by the Inspector General.⁵⁵

The use of chaplains as superintendents of the post schools, on the other hand, was the result of default on the part of line officers who wished no part of the education schemes of the reformers. All attempts to engage officers in the day-to-day progress of the schools came to little. Chaplain Crocker formally requested the detail of officers to the schools in 1886, but the request was disapproved. When Inspector General Joseph C. Breckenridge made the same recommendation in 1888, action was taken the next year, and a general order issued directing that zealous and efficient officers be detailed in charge of all post schools along with the admonition to commanding officers that they "personally aid and encourage those needing instruction in acquiring all that the law requires."⁵⁶

4. The 'Bugbear' of Compulsory Attendance

Few issues regarding the post schools would excite more warm debate and feeling than the issue of compulsory attendance. This army argument was coincident with the public debate in civil society over the need for compulsion in the common schools. In both cases, two well-defined sides faced off. Blending idealism with utility, those who embraced compulsion viewed education as enlightening, uplifting, and essential to republican government and the efficiency of the workplace, in short, a right of each individual which parents, guardians and government need respect.⁵⁷ The opponents of compulsion expressed the laissez-faire argument that compulsion would be an unjustified trespass on parental rights, the taxpayers' pocketbooks, and the individual's free will.

The continuing failure of the post schools to educate the rank and file of the army turned the supporters of those schools to requests that attendance be made compulsory for all soldiers on a first enlistment without an elementary education. It was against the background of such requests that a meeting of the Military Service Institution of the United States was held on January 15, 1887, in the large hall of the Museum on Governors Island, New York Harbor, for the purpose of airing the issue of compulsion in both civilian and military education. In

attendance were eight general officers, four colonels, one major, three lieutenants, and a "large audience, of whom many were ladies."⁵⁸

First organized in 1877 with a membership of forty officers, the Military Service Institution of the United States held as its goal the professional improvement and promotion of the military interests of the United States through lectures, debates, and the publication of a bimonthly journal, first issued in 1879. From its headquarters on Governors Island, the Institution would become the foremost forum for reform in the army.⁵⁹

The main speaker at the January meeting would be General James B. Fry, one of the original four officers who proposed that such an organization be formed. His paper, entitled 'Compulsory Education in the Army,' "provoked any amount of consternation and debate" among the audience.⁶⁰ General Fry began by citing a part of Adjutant General Drum's report for October, 1886, which confessed the failure of the post schools and made recommendation that the education of the enlisted men of the army be made compulsory. Fry suggested that the notion of compulsion in the education of soldiers suggested itself from the public school system, and went on to disparage the civilian schools' use of compulsion.⁶¹

"The establishment of common schools by the State for which everyone must pay and to which all children must go,

was a bare assumption of authority," Fry argued. Neither had the state the means of enforcement, for lack of the "elaborate system of surveillance" found in Europe. Aside from that, compulsion in both civil and military education was wrong. Only parents had the right of coercion. The prevention of pauperism and crime could not justify the use of coercion, which is "hostile to the feeling of personal independence, destroying energy and self-reliance." And not only that of the children; for the consciences of parents as well would be 'quieted' by having the burden of educating their children assumed by the state.⁶²

Fry next took exception to the methods of instruction in the common schools and the injustice of their maintenance. According to Fry, cramming and learning by rote were the common methods of the common schools. Such mindless methods and the secular nature of the course of studies were injurious to the learning of morals. He illustrated the injustice of the property tax for support of public education by describing how half of the annual taxes paid by his father on his Illinois farm was public school tax. Yet he had no children then and therefore no return on his heavy assessment, while "his two Norwegian hired men, who paid no taxes, sent their children to school at the property holder's expense." Relieving parents of the expense of educating their own children actually "depreciates its value and gives it the character of an

alms," Fry claimed. He ended his critique of the common schools by characterizing them as a bad precedent in "Government paternalism," and called for their abolition.⁶³

Fry found the logic of compulsory education in the army even weaker than in the common schools. He pointed to the recruiting office as the proper place to admit educated men and bar the ignorant.

The system [of post schools established in 1866] dragged along until 1878, when a board reported: "To enforce compulsory attendance....would add new penalties for its infraction." The active movement of troops also prevented regular teaching by the officers...In getting the commissioned officers the Government goes upon the principle that elementary education is an individual not a governmental matter. In our army we take only men who want to join and fix our own standard of admission. Would it not be better for us to exact the necessary elementary education as a condition of admission rather than to take those too besotted in their ignorance to voluntarily accept education? I think it wiser to add to the inducements by higher pay rather than to take the ignorant and educate them by force.⁶⁴

Following General Fry was Second Lieutenant Harvey C. Carbaugh, 5th Artillery Regiment. A Military Academy graduate, class of 1882, Carbaugh took special interest in the education of noncommissioned officers of the army in general, and those of the artillery in particular. Within three years he would author an article in the journal of the Institute in which he would call for the general education of noncommissioned officers as a first step in their professional education, and publish a textbook for

their professional instruction.⁶⁵

Carbaugh read a dozen papers written by 'intelligent' artillery sergeants and privates stationed at the coast defense fortifications in New York Harbor. To the applause of the audience, the majority of the papers opposed compulsion; that only educated men need be enlisted, and that the means of self-improvement be voluntary, were ideas strongly expressed by the enlisted men. Several papers supported compulsion however, one urging the idealistic position that "the object of the present age is the extension of civilization, and therefore the soldier is a governmental trust and should be educated."⁶⁶ The debate that followed was warm, with many supporting compulsory public education. Reservations as to the value of compulsion in the army were also numerous, however.

Sheridan's replacement as commanding general by Schofield in 1888 would decidedly tip the educational scales against the laissez-faire argument, however. In February of 1889, the schools established at every post by regulation were ordered to be placed under the charge of "zealous and efficient officers," attendance being a military duty for men on their first enlistment but for only those on their second enlistment without an elementary education, while the school year was fixed at six months, November 1st through April 30th. Older soldiers were welcome to enroll if they wished. Commanding officers were

urged to encourage attendance, while adjutants-general of departments were directed to render annual reports "setting forth specifically the failure or neglect of any post commander to take interest or to facilitate the operations of the schools." As the school day was concurrent with the duty day, some soldiers might be tempted to use enrollment in the schools as an opportunity to shirk both duty and school attendance.⁶⁷

The next month, Major General Schofield reinforced and clarified the order for those who found the notion of compulsion difficult to believe; "As the regulation had made the instruction of enlisted men a military duty, the Major General Commanding is not able to see why there should be any doubt as to the attendance being compulsory." Attendance at the post schools by enlisted men was ruled compulsory, thereafter, enrollment incurring a military duty to be in attendance, a requirement "generally received with bad grace by the line of the army," as it interfered very materially with the work necessarily performed by the enlisted men. Classes were now held during the duty day and soldiers were obliged to attend class as they would any duty. Thereafter, compliance was often with the 'letter of the law' only, and the schools languished until the 'bugbear' of compulsory attendance was finally abolished the next year.⁶⁸

Despite the order that officers take a direct interest

in the schools and the introduction of compulsion, the returns of 1890 painted a depressing picture of enlisted men's education. Inspector General Breckenridge placed the blame squarely upon the shoulders of the post commanders for failing to give the commissioned officers connected with the schools any "adequate and definite work," while lamenting the lack of supervision by department headquarters.⁶⁹

No progress at all was reported in 1890 by the Division of the Pacific. The Inspector General of the Department of the Missouri, Major Prentiss J. Sanger, reported a lack of success on the part of the schools, and requested better facilities, furniture, and teachers, "aided by the occasional presence of the post commander." The Division of the Atlantic wanted to relieve company commanders of the decision as to which soldiers should attend schools. The Department of Texas reported that only 15 men out of an enlisted strength of 684 at San Antonio, its largest post, attended school, while at Fort Clark, none of the 566 enlisted men attended the school.⁷⁰

5. Immigration, Nativism, and Education

As a result of the nativist legislation of 1891 and 1894 which required literacy on the part of recruits to at

least that expected of a thirteen year-old, a better class of soldier was recruited, one already possessing the rudiments of a common school education. The literacy regulations applied to black units as well. One of the original purposes of the schools had been to educate black soldiers and fear was expressed by some reformers that enforcement of any literacy clause with the 'colored regiments' might lead to their disbandment.⁷¹ Yet this was not to be the case. In 1898 a trooper in the 10th Cavalry wrote the following concerning the literacy of black recruits and the selectivity of the army:

Quite a number of people are of the opinion anyone can enlist in the army. This is a mistake and I was told by a non-commissioned officer who was upon the recruiting service not long ago, that he was surprised by the number of young men who applied to enlist but were refused on account of their inability to read. They have had the opportunity, but would not accept them.⁷²

Indeed, selectivity was high for the moment. Recruitment would be buoyed by the depression of '93 and the patriotic fervor attendant to the hostilities with Spain in '98.

The year 1894 dealt with another change to the progress in the education of enlisted men; the term of enlistment was reduced from five years to three. A short first enlistment had been argued for years as a necessary step in the reduction of desertions.⁷³ After 1894 commanding officers had much less incentive to spare their men for the schools as they had two less years in the

ranks. The concurrent increase in new equipment and tactics led commanders to argue that soldiers needed a thorough education in their military duties, if in anything. Time would not permit for any other type of schooling. By 1897, fewer than ten percent of the soldiers in garrison were reported in attendance upon the schools.⁷⁴

On the one hand, the post schools benefited by a better educated group of teachers. James E. Tynes, the first black soldier to land in Cuba during the Spanish American War, was detailed as post school teacher soon after enlisting in the 10th Cavalry in 1896, where he rose to school operator, a position he held until his regiment left for the war. Three 10th Infantry soldiers proved to be remarkable men. John J. Lenny served as post school teacher at Fort Reno, Oklahoma Territory, from 1894 until 1896 with Company 'A'. After discharge in the rank of quartermaster sergeant, he graduated from George Washington University in 1913, Georgetown University Law School in 1914, and thereafter completed the residential requirements for a Ph.D. in politics under Professor Beard at Columbia University. Junior Parish enlisted in Company 'A' in 1896 and quickly rose to the position of first sergeant but resigned it in September of 1897 in order to be detailed as post school teacher at Fort Leavenworth, Kansas. Richard H. McMaster of Company 'D' became post schoolteacher at Fort Sill in February, 1896. Having been successfully

examined for a commission that next year, he received a lieutenancy of artillery and eventually retired as a colonel.⁷⁵ Such men as these were the legacy of higher standards of recruitment coupled with the economic stagnation of the 1890s.

This is not to say, however, that the recruiting service did not fraudulently enlist men below the education standard. The number of men who could not speak, read, and write the English language was substantial enough that at war's end, orders were reissued for department commanders to maintain and report on the state of the post schools. Although unhappy with these orders, they relentlessly continued the administration of the schools. "The experience of many years is," reported the commander of the Northern Division at St. Louis in 1904, "that no public advantage is derived from these schools." They should, he added, be conducted at night with a voluntary attendance policy, common sentiments on the part of many connected with the progress of the schools, or the lack thereof. Sessions held during the day were poor for morale as soldiers not in attendance had to perform the fatigue duty of those who were in attendance. He would use compulsion only for those whose educational level was so deficient that their enlistment was obviously "contrary to the provision of the Army Regulations."⁷⁶

III

SIMPLY AT SCHOOL: O. O. HOWARD AND THE ARMY EDUCATIONISTS

As had happened in Europe, military discipline and authority experienced a shift from authoritarian domination to a greater reliance on paternalism and moral suasion in the United States Army. The perception of soldiers as wooden men at worst and machines at best slowly evolved to that of reasoning and intelligent human beings.

Paternalists held up the ideal of noblesse oblige to brother officers, seeking nothing less than, in General O. O. Howard's words, "a moral and spiritual revolution," a profound change in the conditions of soldiers' lives, a change that could not "be effected with a cudgel."¹

Officers had to become "aware that the social composition of the enlisted personnel would have to change; modern armies could no longer be manned by the outcasts of civil society."² The 'six hundred' would have to be given a 'reason why.' They would therefore need the skills and experience with which to reason.

The men and women who would change the army were well known to each other, often associates at one point in their lives and careers. They very smallness and insular nature

of the army dictated the circumstances of reform. Strong character, a long career, and a determined desire to spread the benefits of a common school education in both the army and civil society, place Oliver Otis Howard at the center of the educational reform movement in the army. He knew and influenced virtually every major educationalist in the army. The development of his own educational philosophy was similar to the experience of the other reformers, albeit, writ much larger, and with bolder strokes. A study of Howard is, of necessity, a study of an educational movement.

1. Early Life and Education

Born in Leeds, Maine, in 1830, Oliver Otis Howard was educated until the age of ten at the local schools during the short winter sessions. The death of his father in 1840 and his mother's remarriage caused a short move the next year to the village of Wayne, where he spent but two months at school. The sum of his education to that point fitted him "more for the details of self-denial than in anything else," he later recalled. At the age of twelve, he went to live at the home of his maternal uncle in Hallowell, south of Augusta, where he attended school during the fall and winter months, working on his uncle's farm during the

summer months. While at Hallowell, he joined the Latin class and began to form a lifelong belief in the need for a common basis of education for all, whether the educational preparation be aimed at trade or profession.³

His preparation for college began in earnest at the age of fourteen. He attended the Monmouth Academy near Leeds for one year, and North Yarmouth Academy, a preparatory school north of Portland, for another. While the rusticated Howard chafed somewhat among the aristocratic scholars of North Yarmouth, diligent study secured him admission to Bowdoin College in 1846 and his graduation four years hence. As college students often did, Howard taught school each winter of his last three years at Bowdoin. Without any plans as to a profession, Howard was presented with the opportunity to apply for admission to the Military Academy at West Point when his uncle, then in Congress, offered him the place of his own son who was unable to pass the physical examination.⁴

Howard's deep commitment to the Christian morality of his New England youth set him apart from other cadets at the Military Academy. He recalled his first years as nothing less than "wretched." A cabal of "aristocratic and rival classmates," mainly from the South, but to include one Bostonian, Henry Larcom Abbot, detested him for his activist morality. Howard neither smoked nor drank, attended Bible class and befriended his professor of

ethics, who was also chaplain. Although he would not own to being an abolitionist, his leanings toward that position became known. His compassion and sense of fairness were equally irritating to other cadets. He associated both with 'cut men,' classmates who were suffering ostracism by their fellow cadets, and the first sergeant of the Engineer Company attached to the academy from the Battalion of Engineers. That he and First Sergeant Lothrop were from the same home town, that the sergeant was the son of Howard's guardian, that he was a distinguished veteran of the Mexican War, and, at the time, seeking a commission, made no difference to anyone. Howard waxed righteous when warned by the Commandant of Cadets of the impropriety of 'fraternization' with an enlisted man. By his own admission, Howard "wasn't yet wise enough to be silent on the subject of what I regarded as wrong."⁵

Upon graduating fourth in a class of forty-six in 1854, Howard was commissioned as a brevet Second Lieutenant of Ordnance. That his New England rival, Henry Larcom Abbot, bested him by graduating second, could not have set well with Howard. For the rest of their careers, the relationship between these two exceptional officers, who would both have such a profound effect on the education of noncommissioned officers of the army, was to remain aloof if correct.⁶ After several undemanding tours at the Kennebec and Watervliet Arsenals, and at headquarters of

the Department of Florida, where, according to his own testament, he was "born again," he returned to West Point in 1857 as an instructor of mathematics. Howard thoroughly enjoyed his teaching duties and spent his off-duty hours in a "systematic study of a religious nature," his thoughts taking a temporary turn to quitting the army in order to enter the Christian ministry. Never one to divorce action from belief, Howard sought the permission of the commandant and the chaplain to establish prayer meetings and conferences for interested cadets. Held after supper, they became well-attended and were later taken over by the Young Men's Christian Association, an organization Howard supported throughout his life.⁷

Among the cadets who regularly attended Howard's meetings was Emory Upton, who would one day take the lead in attempts to reform the army on a professional model. Indeed, Upton was, by his own recollection, at Howard's very first prayer meeting. Raised as a Methodist on the edge of the 'Burned-over District' in Batavia, New York, his parent's "greatest solicitude" had always been to give their thirteen children religious instruction. Upton's education was similar to that of many rural farm boys. "With the exception of an attendance of six months at a High School, my education was limited to that of a common district school," he confided to Howard while a senior at the Military Academy. This formal instruction was

supplemented at home by his elder brothers and sisters. During the winter of 1854-55, he attended one term at Oberlin College, Ohio, before entering the Military Academy at West Point. With the brief exception of the Civil War years, Oberlin turned out more preachers and abolitionists than soldiers, but Upton's career would be that of a soldier-evangelist; he preached the gospel of reform with a contempt for unbelievers unsurpassed by many a revivalist.⁸

Shocked by the profanity and "horrid oaths" so common at the Military Academy, Upton took to reading the Bible "instinctively." He would be remembered as the first cadet at West Point to ever state publically his being an abolitionist. His brother-in-law would later recall that it was at West Point that Upton also took his "decided stand on the Lord's side." Upton attributed this conversion experience to the death of his younger brother in 1858. The degree to which Howard became his religious mentor may only be surmised. But he confided to Howard that it was after attendance at his prayer meetings that he felt "the presence of God's Holy spirit, and that there is a reality in religion."⁹

Howard's concern for the moral lives of the enlisted men and their families led him to become superintendent of their Sunday school, where, assisted by cadets, he "delivered habitually once a week," for four years, lectures "in connection with Bible study." It was during

these years that Howard's peculiar Christian views on military life crystallized. He developed an abhorrence for a "class distinction [between officers and enlisted men], which seemed too intense for our republican ideas, and, indeed, made the army itself disliked by the people at large." He espoused a "paternal system" of leadership and berated "the martinet system" then in vogue. As he later recalled:

I gave much reflection to the subject of discipline and came to fully believe that it was possible to have a higher grade for our enlisted men and a better system of government by officers, especially by those of high rank...the general who cared for his men as a father cares for his children, providing for all their wants and doing everything he could for their comfort consistent with their strict performance of duty, would be the most successful; that his men would love him; would follow him readily and be willing even to sacrifice their lives while enabling him to accomplish a great patriotic purpose.¹⁰

2. War and the Freedman

When war broke out in 1861, Howard resigned from the Regular Army and returned to his home state to assume command of the 3rd Maine Volunteer Infantry Regiment, with the volunteer rank of colonel. By the end of 1864, he was back in the Regular Army with the rank of brigadier general but without his right arm, having lost that limb in the

battle of Fair Oaks, June 1, 1862. In March of 1865, he was brevetted major general, and in May, appointed commissioner of the Bureau of Refugees, Freedmen and Abandoned Lands.¹¹

Howard was determined to secure "health, sustenance, and legal rights" for the freedmen under his care, along with the foundations of education. "Education," he made clear, "underlies every hope of success for the freedman." And within three years of the founding of the bureau, 1400 schools and 700 Sabbath schools had been established, with Howard University as the pinnacle of this educational achievement. These schools were the product of the religiously motivated men and women of the benevolent and religious groups of the North. Professionally prepared as common school teachers, largely in New England colleges and universities, they were missionaries in every sense of the word. One can only imagine that in their company, General Howard must have been at his ease.¹²

While Howard endeavored to educate the freedmen, Congress was attempting to provide for the education of black soldiers, a legacy of the black volunteer units formed during the war. Of particular concern to the post-Civil War army was the morality of the soldiers in the newly created black regiments: the 9th and 10th Cavalry, and the 24th and 25th Infantry Regiments. On June 21, 1866, Representative Halbert E. Paine of Wisconsin moved to

amend the Army Reorganization Bill as follows: "That one chaplain may be appointed for each regiment of colored troops, at the discretion of the President, whose duties shall include instruction of the enlisted men in the common English branches of education."¹³ By the Army Act of July, 1866, a chaplain was actually assigned to each black regiment. In addition to his regular duties of a religious nature, he was responsible for an education program. This provision was unique as army chaplains were not assigned by regiment, but by each department commander to posts where the need appeared greatest.¹⁴ Legislation between 1865 and 1898 limited the number of chaplains at thirty to minister to the thirty-six white regiments then in service.

It was in March of 1872, while still serving as commissioner of the Freedman's Bureau, that Howard addressed the Committee on Military Affairs of the House of Representatives concerning his educational aspirations for the enlisted men of the Army.

I believe...that during part of the year the soldiers should be under regular instruction in the English branches of an elementary education, at least reading and writing, so that no soldier in the United States service shall ever be obliged to sign papers by his mark. At many posts the soldiers are comparatively idle. This process would help discipline, lift up the soldiers, and discharge them, at the end of their service, better men than they were at enlistment. It would be mighty beneficial to devise some plan by which regular employment of some kind can be secured, so that no officer or man, even at our remote frontier posts, shall be left to

the degrading effects of idleness. It ought to be held an honor to be a soldier of the United States.¹⁵

To that same House Committee, Major Thomas McCurdy Vincent, Assistant Adjutant General, submitted tabular statements to a report comparing the schools of European armies with those in the United State Army. Among the categories for each army was information concerning provision for the professional education of noncommissioned officers. In his report, Vincent suggested that two or more schools for the education of noncommissioned officers of the United Stated Army be created, and that the course of study and details of its establishment be determined by a board of officers selected from the artillery, cavalry, and infantry.¹⁶ Seventeen years would pass before any attempt would be made by the War Department to provide professional instruction to the noncommissioned officers of the army.

Howard and Vincent, so close in their educational aspirations for the reform of the army, were about to become locked in a debacle that would almost end Howard's career. Whatever satisfaction Howard derived from his tenure as head of the Bureau dissolved into a bitter struggle to clear his name and reputation against two charges, which were, as Howard informed his counsel: firstly, that he was "pecuniarily and criminally responsible for disbursing officers over whom...he had

administrative control;" and secondly, that he "expended money, particularly interest, for...payment of bounties...for school purposes, and for other public matters not covered by the laws as [Secretary of War William W. Belknap and Assistant Adjutant General Thomas Vincent] interpret them."¹⁷ While Belknap was forced to resign from office in 1876 for allegedly accepting bribes, Vincent hounded Howard with the methodical perseverance common to conscientious public servants and crusading reformers.

3. Department of the Columbia

Between 1874 and 1881, Howard commanded the Department of the Columbia, conducting campaigns against the Nez Perce Indians in 1877 and the Bannocks in 1878. Howard never had more than two chaplains assigned him for the fourteen military posts and one thousand men under his sprawling command, which included all of Washington, Oregon and Alaska, and part of Idaho. He was finally reduced to one, "a Romanist," whom Howard sent on a circuit of those posts, while the 'Christian General' himself held "fully attended" services at the posts he visited.¹⁸ Howard's aide-de-camp noted that the general had "no control over the number or kind nor...any power of appointment," of chaplains in his

department. "He would be glad to receive more Chaplains or Christian workers of any kind, for there is a great scarcity of such all through this section of the country."¹⁹

Upon the end of his successful campaign against the Nez Perce in 1877, Howard received a congratulatory letter from his old Bible student, Lieutenant Colonel Emory Upton, then serving with the 4th Artillery Regiment at the Artillery School, Fort Monroe, Virginia. Upton had just returned from a two-year tour of Asia and Europe, and was recently appointed superintendent of theoretical instruction at the school. Upton was most favorably impressed with the education given noncommissioned officers and enlisted soldiers in the armies of Italy and Germany. He stressed this point in his report, suggesting that such schools needed to be organized in the United States Army.²⁰ His report included a detailed description of the sergeants of the Italian army, maintaining that they were representative of the other European armies visited on the Continent. His hope was that his narrative would impress his readers "with the conviction that, if in future wars we would increase the changes of victory, and diminish the waste of human life, we should devote our attention to the education of our non-commissioned officers no less than the commissioned officers of our army."²¹

In his letter, Upton praised not only Howard's

persistence in the Nez Perce campaign, but also his efforts "in the struggle between good and evil," that other great campaign waged by all reformers. No matter that Howard was "taunted as a Bible Chief," reassured Upton. He averred that Howard had the strength of character "to bear up under slanders."²² Howard was most gratified by this rare commendation from a brother officer, fellow reformer, and activist Christian.²³

Despite his limited assets, under Howard's command the garrison schools held regular hours and libraries containing "books of reasonable interest" were provided the soldiers at each post.²⁴ Under Howard's encouragement, the officers and their families organized a garrison Sunday School at Vancouver Barracks, his headquarters, in 1878. "Where there is a will there is always a way," Howard wrote to his mother concerning his Sunday School efforts.²⁵

Howard even provided for the instruction of prisoners. He offered to assume personal responsibility for seeing that prisoners attend the post school after Colonel Henry Andrew Morrow, commanding officer of the 21st Infantry Regiment, Vancouver Barracks, complained of their non-instruction. Reluctant to burden his commanding officer with a duty he thought beneath the dignity of a general officer, Morrow informed the prisoners that they would not be required to attend the school. It would come as quite a surprise for Morrow to learn that General Howard had called

the prisoners to his headquarters in order to speak to them personally about their education. Upon their informing him that their commanding officer had excused them from such duty, Howard waxed righteous. In a terse letter to a skeptical Morrow, Howard described the "embarrassing position" in which he had been placed. "If you send them, I will teach them," admonished Howard, whose uncharacteristic monosyllabic simplicity and deliberate use of the first person singular, left none of his meaning to be lost on his subordinate.²⁶

Morrow obliged, and even made some suggestions as to what the men might profit from most. All things set aright, Howard wrote out detailed instructions for Morrow to follow.

Now as we shall have our usual Garrison School tomorrow please arrange to have the Sergeant or non-commissioned officer in charge bring them to the room above and have them remain there during the session of the school I will see that they are cared for. The sentinel who accompanies them and the Non-commissioned officer should wear their side arms. The reading we will give them at the rooms....A good opportunity to wash up must of course proceed their coming to the library.²⁷

4. Superintendent of the Military Academy

From 1881 until 1882, Howard was superintendent of the Military Academy, succeeding General John M. Schofield in

that prestigious office. Although he found the post schools for enlisted men and their children at West Point to be very large, Howard experienced great difficulty obtaining qualified teachers. Detached companies from the line of the army, one company of cavalry and artillery each, were assigned to West Point to aid in the training of the cadets. An engineer company, Company 'E', detached from the Battalion of Engineers at Willets Point, New York Harbor, completed the compliment. As the use of engineers as extra-duty men was forbidden by Army Regulations, it was from the enlisted men of the two line companies that Howard had to choose the extra-duty schoolmasters. Educationally, Howard found the cavalry company to be the worse off, while the artillery detachment was composed mainly of mechanics and laborers. Finding the engineer company, on the other hand, to contain men who were "better informed and more intelligent," it was from that unit Howard selected the extra-duty privates to be detailed as overseers of the post schools.²⁸ When called to task by Adjutant General Drum for this irregularity, Howard defended his orders on the basis of necessity and custom, the detailing of engineer soldiers as teachers predating his arrival at West Point, presumably during Schofield's tenure. "The two men thus detailed were upon...duty in the Superintendent's office during the day time," explained Howard, "and attended to the duties of teachers, or overseers of the Post School,

at night. They earned well the compensation given them," Howard reported to Drum.²⁹

So well-established was Howard's reputation as an educationalist and a moral crusader that civilians with questions regarding education in the army simply addressed them directly to him. While Superintendent of the Military Academy, Howard was more in the public eye than ever. In October of 1881, he received a request from a Philadelphian who wished to provide the frontier posts with books of religious and secular interest.

About what proportion of Posts are without Libraries, and where Libraries exist do the men seem disposed to make use of them to inform themselves? From a remark I once heard made by an officer who had served on the frontier, I have suspected that much of the card playing, and drinking sometimes complained of in the army, was due to the fact that at such Posts there was no Library or other means of improving themselves, and that card playing and drinking were resorted to, to kill time by the thoughtless, and that if such Posts had good Libraries much of the bad influence would be overcome? What do you think on the subject....In my opinion Army Posts should be centres from which a good influence should be exerted morally as well as physically throughout the forts of our country in which they are located, but of course in order to accomplish that result, those at those Posts [sic] must have the right-influence about them, by having proper means of improving themselves in the right way. To what extent do those means exist at present?³⁰

Howard replied in a detailed letter concerning his opinions. He was well aware of the several civilian organizations such as the New York City Y.M.C.A. and the

'Soldiers Library Association,' of Auburn, New York, which provided free books to the post libraries and reading rooms. Civilians, both male and female, had been providing post libraries with tracts, books, and other reading material ever since the enthusiasm of the Civil War first made the soldier a social cause. Indeed, it was Mr. John A. Fowle of Dorchester, Massachusetts, along with his future wife, Elida B. Rumsey of Tarrytown, New York, who subscribed, organized, built and operated a 6,000-volume lending library for the invalid soldiers of Washington, D.C., throughout most of the war. Howard heartily referred his correspondent to one of the 'efficient' secretaries of the Auburn society, a Mrs. Evelina Martin. Mrs. Martin was none other than the mother-in-law of Colonel Emory Upton, Howard's religious protege and the most determined reformer in the army prior to his untimely death in 1881. "She loves to send books for soldiers to read," Howard would write to yet another correspondent on the same subject eight years later.³¹

Actually it was not uncommon for reforming sympathies to run in families. A characteristic of the paternalist movement throughout most of the nineteenth century was that the initiative for such methods usually originated with commanders, their wives, staff officers and chaplains, while rarely was there consensus among them as to strategy or goals. Half-hearted War Department policies more often

came after the fact. At whatever post he might be stationed, Howard would organize the officers' wives around one project or another to benefit the garrison residents.

And resistance to reform was often pervasive. One junior officer saw such benevolence as a sham. His anger was directed at the commanding officer's wife, maternalism, perhaps, being the logical counterpart to paternalism,. She only "poses as the soldier's friend," he claimed, "and [in exerting] herself to get up a gymnasium or reading rooms for the soldiers, or else sewing circles for the soldiers' children...she imposes on all at the post more or less her desire, so as to make it disagreeable to every one." The officers' wives, dragged into such schemes, did so at the expense of the care of their own households, or so he said. "If they would but remember that 'charity begins at home,' that the soldier is in time of peace better taken care of than the officer, and that the soldier's life would be happier and better if his officers are a happy and contented set of men."³²

Two months later, a civilian firm wishing to sell its Arithmetical Frame to the Army and Navy schools approached Howard along with General John Eaton, United States Commissioner of Education at the Federal Bureau of Education. Their product, a spring operated machine using combinations from 3456 columns of 18 figures each, could be manipulated by an "industrious" teacher to drill students

"from Numeration to Metric System, Percentage and Fractions, & c. & c."³³ Howard attached a letter from the officer in charge of the post school at West Point to his response which stated that he had "no control over Army schools other than this post."³⁴

5. Western Commands

Following these two short years at West Point, Howard was given command of the Department of the Platte, with his headquarters at Fort Omaha, Nebraska. Within the Military Division of the Missouri, the Department of the Platte included the states of Iowa, Nebraska, Wyoming, Utah, and part of Idaho. In April of 1886, Howard was promoted to Major General and given command of the Military Division of the Pacific, one of the three military divisions into which the country was divided.³⁵

After settling into his headquarters at the Presidio in San Francisco, Howard established himself with local religious and civic groups. One charity particularly interested him as it aided a kindergarten. When Howard lectured on its behalf, he even arranged that a military band be present for the occasion. The kindergarten did not even begin to gain national attention until the mid-1870s, at which time Susan Blow organized a training school for

teachers at St. Louis. This interest in such a new and innovative German transplant, on the part of a regular army officer, is indicative of both the progressive and paternalistic nature of Howard's educational philosophy. That the kindergartens were used primarily to "tame the dangerous classes," through the education of the children of "low and degraded parentage," is consistent with Howard's strong streak of moral paternalism.³⁶

It was at Fort Omaha that Howard made the acquaintance of two men who would become deeply embroiled in the movement to reform the lives of the enlisted men through education and moral suasion. The first was Howard's post chaplain at Fort Omaha, Orville J. Nave, Corresponding Secretary for the Corps of Chaplains.³⁷ The other was Brevet Major William Henry Powell, 4th Infantry Regiment. Powell managed amateur theatricals at Fort Omaha to help boost the morale of the soldiers at that frontier post.³⁸ He would later become an enthusiastic supporter and constructive critic of the army's attempts to educate enlisted men. As commander of the Division of the Pacific, Howard encountered one of the most controversial chaplains in the army, Henry V. Plummer.

Orville J. Nave

Chaplain Nave received an A.M. in 1873 from Ohio Wesleyan University, but was not appointed a chaplain until

1882. He was alive to the idea of education and the discipline it encouraged in the soldiers. He was equally quick to see the need to use moral suasion on their officers as well, as the poor example their all-too-often morally low lives provided, was counterproductive to his own designs.³⁹

Nave began publication in 1888 of the "Army Sword and Shield," in which he reviled the dissipation of both officers and men. He attempted distribution of the paper to all officers, three to each barrack, one to each hospital and guardhouse and as many to noncommissioned officers and married soldiers as possible. Although "a score of officers...directed its discontinuance," he surmised the others either "tolerated or enjoyed" its message. General Howard was most displeased with Nave's tactics, refusing to contribute articles while warning Nave that "[c]ombative statements are calculated often to do more harm than good." True to his own conviction that the reading material put into the soldiers' hands be uplifting, Howard suggested "articles that are cheerful, hearty, hopeful and happifying [sic]. Graphic descriptions of real life and the evolution of strong characters will be most read and do the most good," advised Howard.⁴⁰

Henry V. Plummer

Another activist chaplain within Howard's command was

Henry V. Plummer, the first black to be appointed to a chaplaincy when he joined the 9th Cavalry Regiment in 1884. A graduate of Wayland Seminary, Washington, D.C. and an ordained Baptist minister, his efforts to turn both officers and men to a moral lifestyle earned him both praise and animosity.⁴¹

Chaplain Plummer spoke for many chaplains in suggesting as early as 1887 that a 'Bureau of Education and Literature' be established at the War Department. By 1890, Secretary of War Redfield Proctor could assure General Howard, then commanding the Department of the East, that "the pleadings of the chaplains already cause larger correspondence than any other class of officers." Yet even such progressive reformers as Schofield, Proctor and Howard felt need to offer as caveat against the remonstrances of the chaplains for the formation of a Chaplains' Bureau, their fears that such an organization would be plagued by sectarian politics and strife.⁴²

Plummer was a committed temperance advocate among black soldiers of the 9th Cavalry Regiment. On Christmas Eve of 1889, he published a handbill entitled 'A Philanthropic Appeal,' in which he addressed the garrison residents at Fort McKinney, Wyoming Territory, on behalf of "the cause of temperance and to arouse everyone to the importance and necessity of curtailing the use of intoxicating drink," for Plummer, "the leading vice of the

day." He lectured and organized for the cause until his court-martial and subsequent dismissal from service in 1894 on questionable charges of conduct unbecoming an officer.⁴³

6. Department of the East

From 1888 until his retirement in 1894, Howard commanded the Division of the Atlantic, redesignated Department of the East in 1891, from his headquarters on Governors Island, New York Harbor. Virtually every military post east of the Mississippi River fell under his overall command. At the annual meeting of the National Education Association at Toronto, Canada in 1891, Chaplain Allen Allensworth quoted Howard's reflections on the "little army" of his day as being "a most pregnant and active school," with the torpedo and engineer school at Willets Point, and the artillery school at Fort Monroe as being at the summit of that military educational system. For it was at those two service schools that "all the new discoveries in mechanics to the country's need" were assimilated; following "up with experiments, all advances in electricity, hydraulics and steam power."⁴⁴ Both Fort Monroe and Willets Point were within Howard's command, and his moral suasion was felt by both garrisons. He quickly ascertained the religious background of the garrison

residents, Episcopalian and Roman Catholic, respectively.⁴⁵ In 1889, he gladly supported with a personal visit officer-instructed Bible classes for the men at Fort Monroe.⁴⁶ And when at Willets Point, an officer was suspected of being 'much addicted to strong drinks,' and an enlisted man deserted, Howard took personal interest in their situations.⁴⁷

Howard busied himself with the usual church and civic activities. Some of these civilian organizations benefited soldiers. The movement to establish such facilities as libraries and reading rooms became so widespread that a civilian was able to use the passion of the paternalists for setting up 'literary societies,' reading rooms and libraries, to involve them in a fraudulent scheme, the 'United States Military Post Library Association.' This organization of one man, John B. Ketchum, solicited money as contributions for the purpose of providing free religious reading matter and other materials at substantially reduced prices to the aforesaid club. The 'association' published its own periodical, the U.S. Battle Flag, and made almost every high-ranking military officer and many prominent citizens honorary officers of the association. After years of frustration on the part of post treasurers, a War Department investigation of 1885 found that hardly any post was the recipient of such largess. Unperturbed, Ketchum continued his solicitations

as secretary of the 'Army Aid Association' from an office at 32 Nassau Street, New York City. With characteristic effrontery, he named Major General Howard as vice president of his new organization.⁴⁸

Howard's interest in army education continued unabated. In his annual report of 1890, he stated that despite the advances made by the post schools, the "system had not yet attained a proper status...and some method of obtaining more satisfactory teachers needs to be discovered." He then made a most innovative proposal for the procurement of qualified noncommissioned officers, similar to the noncommissioned officers' schools of the German army. Howard recommended that a system of school battalions be established at some convenient point, such as Fort Porter, in western New York State, for the military education of boys from seventeen through twenty-one years of age as noncommissioned officer candidates for the army and militia.⁴⁹

Allen Allensworth

Although Howard did not know Chaplain Allensworth personally, his influence on his fellow educationalist was profound. And as one of Allensworth's closest associates in the army would become Chaplain Orville J. Nave, they had a mutual acquaintance. Born a slave in Kentucky, Allen Allensworth was, in the first instance, self-educated,

through use of a Bible and a Webster speller. It was not until 1867, after having escaped his last owner in 1861, enlistment in the hospital corps of the 44th Illinois Volunteer Infantry Regiment, service as a petty officer in the United States Navy, and operator of two successful restaurants in Louisville, that he enrolled in his first formal school. And it was in 1867 that Allensworth requested Howard's aid in gaining a scholarship to Wilberforce University, Ohio. Having no influence with the eleven year old institution run by the African Methodist Episcopal Church, Howard referred Allensworth's letter to the university's president and recommended that Allensworth write a letter to him as well.⁵⁰

Allensworth did not enter Wilberforce, but enrolled in Roger Williams University in Nashville. He excelled to such a degree there, that he was chosen by the principal to teach in a Freedmen's Bureau school. It was probably at that time that Allensworth first came under the educational influence of General Howard. After ordination as a Baptist minister, he graduated from Ely Normal School, Louisville, Kentucky, established by the American Missionary Society of New York after the war. Among his accomplishments would be that of school teacher, financial agent, minister, pastor, and elected Republican candidate to the National Republican Conventions of 1880 and 1884, from Kentucky's Third Congressional District.⁵¹

When appointed chaplain of the black 24th Infantry Regiment with the rank of captain in 1886, he was only the second black to hold such a position, the ill-fated Chaplain Plummer being the first. Allensworth became convinced that a soldier needed a basic education to perform efficiently in the service and to adapt himself to life in civil society after discharge. Certainly black soldiers were even more in need of such education than whites.

At Fort Supply, Oklahoma Territory, he instructed the soldiers in English and in the history of the United States. When the regiment moved to Fort Mayard, New Mexico, he expanded the post school to include four instructors to teach the 118 men enrolled in classes. It became the practice to select noncommissioned officers from among those who had attended these classes. Allensworth contributed much to the financing of these classes himself. He made his lectures more interesting by the use of a stereopticon and slides.⁵²

In March of 1889, he wrote a booklet entitled, 'Outline of Course of Study, and Rules Governing Post Schools at Fort Bayard, New Mexico,' in which he detailed the graded levels of his program and reviewed the content of each subject taught at every level. He separated his program into two parts, one for children, and one for soldiers. He designated the subject matter to be taught

by the day of the week, as well. For example, Monday was grammar, Tuesday for arithmetic, Wednesday for bookkeeping and writing, with emphasis on military records, and so on. The course work for each school was further divided by grade: first grade being for privates, second for corporals and third for sergeants.⁵³

Chaplain Allensworth's achievements in education led to an invitation to deliver a paper on the topic, "Education in the United States Army," at the annual meeting of the National Education Association at Toronto, Canada, in 1891. His request for official permission to attend the meeting was denied, however, by the War Department on the grounds that such orders were not authorized by regulations. Only by applying for a leave of absence, and by paying his own way, was he able to attend.⁵⁴ At the N.E.A. meeting he betrayed his idealistic views in pointing out to his colleagues, that in the United States Army...

it is now a recognized fact that to be a good soldier a man must be a good citizen, therefore the United States Government aims at giving its soldiers a fair English Education. It does this not only with a view of utilizing their increased knowledge in its defence, but with the object of returning him the civil life a more intelligent citizen.⁵⁵

By 1892 his progressive system of education for enlisted men had come to the attention of the War Department. Lieutenant Colonel Royal T. Frank, Adjutant

General, recommended its adoption and asked that ten copies with charts, be purchased and forwarded to the Adjutant General Department for use in the post schools for enlisted men.⁵⁶

His regiment was transferred to Fort Douglas, Utah in 1896, where Allensworth continued his proven educational program. He also established technical classes to train such specialists as were needed by the regiment, but not provided by the War Department: printers, bakers, telegraphers, clerks and, most importantly, teachers.⁵⁷

William Henry Powell

A line officer who shared Howard's belief in the efficaciousness of the use of moral suasion in the army was Major William Henry Powell. Powell was a firm believer that beside the educational advantages to the soldiers, of whatever race or nationality, the greatest benefit to both the men and the service would be that "while undergoing instruction," they would be "rid of the idle time they have on their hands, - that most pernicious of all evils in a soldier's life" Such idleness he warned, "leads to vice, and vice to degradation."⁵⁸ It was no coincidence that Powell maintained a close and mutually warm friendship with General Howard ever since they had served together at Fort Omaha.⁵⁹ During his service with the 22d Infantry Regiment, he had probably seen some success for the schools

despite the indifferent teachers and materials with which they were supplied. A persuasive exponent for the recruitment of Indians as a means of "elevating [them] to our standard of civilization," he held that the success of such a policy would depend upon their education in both spoken and written English. "The post schools now in vogue would assure this," he predicted in 1890.⁶⁰

The enlistment of Indians was experimented with from 1891 until 1897. Although General Howard was skeptical, he predicted a modicum of success should the results equal those from the enlistment of 'the colored element,' namely that they be "kept neat and clean," and obliged "to do everything in an orderly manner." Howard could assure civilians that the Army would "never allow them [the Indians]...to be much in idleness."⁶¹

Howard's cautious expectations were overshadowed by the enthusiastic sponsorship for Indian enlistments by the Commanding General, John M. Schofield, and the Secretary of War, Redfield Proctor. For these reformers, the purpose of enlisting Indians was twofold: first of all, to provide employment for Indian graduates of the various government boarding schools, and secondly, nothing less than their complete acculturation. Assimilation of the Indians into white society was the very purpose of sending young Indian boys to the boarding schools in the first place. To that end, the segregated Indian companies were not banded into

regiments as was the case with blacks. Instead, the Indian companies were seeded among white regiments.⁶²

Yet the Indian recruits, from government schools and reservations alike, had little enthusiasm for spending years away from their families and failed to reenlist in significant numbers. Having their families with them was not an option for enlisted men. The vaunted benefits of Howard's military discipline proved repugnant to the Indians. Educationally, the Indians were at much more of a disadvantage than black or white soldiers since most of them could neither read, write nor speak English. Even immigrant recruits who spoke no English often had some familiarity with their written native language. Indian noncommissioned officers were no better off. It was impossible for an Indian first sergeant or quartermaster sergeant to do the paperwork involved with their positions, necessitating at least one company commander to detail white noncommissioned officers to those positions, leaving the Indian senior noncommissioned officers as mere figureheads.⁶³

Classes for Indians at the post schools tended to be too elementary, learning how to sign their names being a major effort for them. Dissension among white soldiers of the regiments to which the Indian companies had been attached also resulted. Fear of being placed under the direction of Indian noncommissioned officers, and the

perception of themselves as having to do "all the dirty and disagreeable work, and endure the exposure, while the Indians are comfortably housed in school," created a degree of tension between the races not experienced by soldiers in the black regiments.⁶⁴

An award-winning essay in the Journal of the Military Service Institute of the United States, by First Lieutenant Alfred C. Sharpe, who served with Powell in the 22nd Infantry, described the 'system' of post schools of 1891 as being "what it was fifteen and twenty years ago, - a disappointing and melancholy spectacle. It is the play of Hamlet with the part of Hamlet left out," for lack of professional teachers and a logical system, "if we may dignify it by such a name," he added.⁶⁵ If the army was going to bother to provide a common school education for its soldiers, argued the reformers, then the effort should not be half-hearted, but rather, similar to the civilian models. The need for a system of education became increasingly called for, one which would make department commanders accountable for the proper functioning of the post schools within their commands. It is a truism in the military that policies lacking command emphasis became dead letters.

Major Powell was in complete agreement with Sharpe. Powell was outspoken on the need for a system on the civilian model:

What we need in the army is a SYSTEM of education. All towns, cities, and counties have a system as adopted by a schoolboard, and superintendent of schools is appointed to see that the system is followed. In the army, where everything necessarily must be systematic, there should be an educational bureau; the War Department should be the board to adopt the system, and an officer should be detailed for the duty of superintendent, at Washington, to require the system to be carried out....There ought to be two primary and two grammar classes [and the men placed in either by examination].⁶⁶

What Powell and Sharpe failed to see was the bureaucratic dimension to the failure of enlisted education in the army. Overburdened commanders and adjutants-general had been reduced to a concern for pure form rather than substance. Harmony within the military system demanded that commanders create fictions to fill their returns to Washington, reports which would claim at least marginal success, and which would allow the adjutant general to report annually that something was being accomplished.⁶⁷ Bureaucratic imperatives outweighed the functional concerns expressed by reform-minded line officers.

7. Retirement

Howard had for many years championed the need for colleges "which seem to make no class distinction" as essential to the supply of teachers for the black schools,

and had suggested as much to President Elect Garfield in 1881. He mentioned Southampton and Berea College, Kentucky, as being such institutions.⁶⁸ Upon his retirement from the army after forty-four years of commissioned service in November of 1894, Howard continued his educational mission in civil society. The next year, much in the spirit of Howard University, he founded the Lincoln Memorial University at Cumberland Gap, Tennessee. With a college, normal school and industrial school, the university was established for the education of 'mountain whites.'

Whether soldier or civilian, black, white or red, Howard's solution to the problem of poverty, be it physical or spiritual, was education. Education of the New England variety, of course. Bruce White has characterized Howard's vision of an economic system as 'Christian socialism.'⁶⁹ His desire to see less of a 'class distinction' between capitalist and labor was thoroughly consistent with his experience in the military. The common schools of the nation were, to Howard's way of thinking, an essential element in the republican ideal. "I would not wonder," he had written to his sister a few years before his retirement, "if sundry parochial schools in New York City were equal in training to sundry public schools; but if all the parochial schools should show themselves superior it would not change my favorable opinion of our glorious

system of common schools on which we depend, in my judgement, more than upon any thing else for the unity and stability of our nation."⁷⁰

Conscious that the education of the enlisted soldier was, in the first instance, accomplished in the common schools, he lauded those institutions for the military virtues stressed within their confines. "The schools of the United States," wrote Howard for the civilian press, "are remarkable for the exact obedience from their superintendents and teachers. There are in these institutions probably 5,000,000 boys, who, for at least ten years of their young lives, are accustomed to take part in what General Sherman called 'all that is manly and noble in the military profession.'"⁷¹

At the end of his career, Howard summed up his impressions on the progress made by the army in the area of education of the enlisted soldier.

Since I entered the army in 1850, I have noted a constant improvement in that body. The average enlisted man now is not more loyal to the flag, but he is more intelligent than formerly....Of late his education has been well provided for; while discipline, which is vastly more needed in a republic than in a monarchy, has not been relaxed. The environment of officers and soldiers, as a rule, has improved their social advantages: they have come from frontiers to the neighborhood of centres of population. The enlistment is for three years only; and during that time the young men in our garrisons are simply at school: hence there can be no excuse for looseness of morals.⁷²

IV

THE FAILURE OF THE POST SCHOOLS

The single greatest problem with the post schools was the want of competent teachers. The reformers' calls for military teachers with the rank of noncommissioned officer, the recruitment of civilian normal school graduates, military or civilian normal school preparation for teachers, and a bureau of military education, all came to nought. Yet the existence of such a model in the British army was well known.

Among reformers, interest in England was modest at best. Officers preferred to visit the Continent, while civilians found little in the laissez-faire English national scheme of education to inspire the American public toward their views on compulsory education. Neither England nor the United States used compulsion in the general education of civilians or in force development for the military.

During his visit to England in 1856, Captain George B. McClellan had been particularly impressed with the position of 'schoolmaster sergeant' in the English Cavalry, the cavalry being his own arm of the service.¹ His report

introduced this functionary to the officer corps of the United States Army. In 1872, Henry Barnard, a civilian educationalist second only to Horace Mann, described for his civilian readership the system of graded education for British noncommissioned officers, along with the normal school where the teachers of the army schools were prepared, in both his Journal of American Education and in his large book of European military schools.²

In 1882, officers read of Captain Joseph P. Sanger's tour of inspection of England's Royal Artillery Corps. Sanger reported to his readers that he had found that with few exceptions, "no private soldier can be appointed corporal unless he had received a third-class certificate of education in the brigade school, and no corporal can become a sergeant unless he is in possession of a second-class certificate."³ In other words, the equivalent of an elementary school education was a precondition for promotion to a sergeancy in the British Army.

Yet despite the exposure given in the United States to the thorough system of general education in the English army, no attempt was made to emulate its success. Indeed, all attempts to borrow any feature of that system were frustrated. The failure of the army to create a corps of educated schoolmasters, an essential element for any serious attempt to bring the benefits of a common school education to the rank and file of the army, is a matter of

no small consequence to a study of the education of the noncommissioned officers of the army.

1. The English Schoolmaster Sergeants

Warrants issued in 1811 officially recognized the regimental schools already in existence and created a new army specialist, the Military Schoolmaster. A sergeant of the regiment was usually the schoolmaster and adult pupils were charged 6d. to 1s. per week for their education. While many of these schools were discontinued in the 1820s as an economy measure, so popular did the schools become that by 1842, on average, as many as eighty men per unit were paying voluntarily for an elementary education.⁴

In the same year, an army committee suggested that the Royal Military Asylum at Chelsea, established by the Duke of York in 1812 for the education of soldiers' sons, be remodelled on the lines of James Kay-Shuttleworth, the leading proponent of undenominational schooling, as a normal school for army schoolmasters.⁵ This recommendation was taken seriously by the Conservative Peelite, Sidney Herbert who, as Secretary of War from 1844-46, reorganized the Duke of York's School along the lines suggested, and created the office of Inspector-General of Military Schools, charging him to implement the committee's

recommendations.⁶

The Reverend G. R. Gleig, Chaplain-General to the Army and friend of the Duke of Wellington, was appointed as first Inspector-General of Army Schools. He revived the Military Schoolmasters as the Corps of Army Schoolmasters and established a two-year training program at the Royal Military Asylum at Chelsea. After a period of military instruction, civilian teachers, usually more numerous, were also admitted to the Corps. From competitive examinations were chosen the forty candidates to be admitted each year. The second year of the course was served as a pupil-teacher.⁷

In 1854, schoolmasters were divided into three classes for pay purposes and a class of assistants added. The first-class schoolmaster served as a warrant officer, while the second and third-class ranked next to regimental sergeant-major. The assistants ranked as sergeants and were often active duty sergeants on temporary assignments. In 1863, the office of Superintending Schoolmaster, with a commissioned rank of ensign (cornet for those in the cavalry arm) was created and appointments made from the most experienced first-class masters. Henry Barnard reported that the Superintending Schoolmasters, eventually twelve in number, were appointed to annually inspect all army schools under their several military districts, and examine the candidates for pupil-teachers and school

mistresses.⁸ Wearing the blue uniform, with chevrons of the Corps of Army Schoolmasters, and accoutered with sword and sash, the schoolmaster found himself in an ambiguous social position; as noncombatant noncommissioned officer, he became distrusted all round.⁹

The number of army schoolmasters almost doubled between 1861 and 1869. It is somewhat surprising for, as a consequence of the Newcastle Commission findings, the laissez-faire practice of 'payment by results' was in fashion and funds for education were shrinking. These schoolmasters were also supplemented by several hundred contract schoolmistresses, trainees and assistants.¹⁰

But economies were being exacted in the army as well, and the Normal School at Chelsea was forced to cut back on instruction. Add to this the comparative low status and pay of the schoolmasters and the growing dissatisfaction of the masters with their circumstances, and the decline in applicants that also characterized this era becomes understandable. The Military Education Commission of 1870 criticized the Normal School at Chelsea for its lack of instruction in teaching, and recommended it be closed and the ranks of the Schoolmaster Corps be filled with graduates of civilian institutions. Two other committees, one in 1883 and another in 1887, made the same recommendation. The school was finally closed in 1888, and all future applicants, soldier and civilian alike, were

sent to the regimental schools to be trained as assistants.¹¹

An attempt was made to end the essentially voluntary nature of attendance at the regimental schools in 1849 when all recruits were ordered to attend school for two hours a day.¹² This was decreased to four hours per week by 1856 as schooling placed a considerable strain on men already fully occupied, and in 1859 the regulations put off schooling until recruit training was completed. Compulsory attendance was ended entirely in 1861 as the result of a test case of 1858 in which law officers of the Crown found mandatory classes to be inconsistent with the military discipline of recruits.¹³ In the case of noncommissioned officers, however, commanding officers might order them to attend school. An Article of War of 1858 made it a court martial offense for any soldier to absent himself from school once ordered to attend, but proved so difficult to enforce that it became almost a dead letter by the late 1860s.¹⁴ Experience was to prove that men could not be compelled to become educated.

One attempt to provide incentive for soldiers to attend school made promotion contingent upon the successful completion of various levels of education. Three levels were established by 1861, each awarding an army certificate of education being awarded upon successful completion of the appropriate examination, and each successive

examination linked with promotion. The third-class certificate entailed an examination in reading simple narratives, simple writing from dictation, the four compound rules of arithmetic and the reduction of money. The second-class certificate required greater facility in reading and writing, knowledge of regimental accounts, simple interest and proportion, and was a prerequisite for promotion to sergeant. To qualify for the first-class certificate, a pass was required in two out of ten more advanced subjects, to include English, history, algebra, plane trigonometry, fortification, drawing and chemistry.¹⁵

In 1871, a fourth-class certificate was introduced in order to mark the stage at which the recruit was exempt from compulsion in schooling, but was discontinued in 1888 for reason that the requirements were so low as to be almost meaningless.¹⁶ In 1872, possession of the first and second-class certificates of education were made a condition for promotion to sergeant and corporal, respectively.¹⁷

2. Extra-duty Privates as Teachers

In providing that teachers of the post schools be extra-duty privates, General Orders 24 limited whatever good effects might have come from it. Extra duty pay was

introduced in 1866 and entitled men detailed for more than ten consecutive days as mechanics and artisans to an extra thirty-five cents per day and men detailed as laborers, teamsters or clerks to twenty cents extra per day. In 1884 this sum was increased to fifty cents and thirty-five cents per day, respectively.¹⁸

Therefore, one extra-duty private for every fifteen soldiers enrolled, earned thirty-five cents extra duty pay, fifty cents after 1884.¹⁹ The range of students was broad, children in the day and other enlisted men thereafter, to include noncommissioned officers, his superiors. Also, the schoolmaster was still liable to guard duty and other duties at the discretion of his officers. Although the school term might last only four months, the possibility of using qualified noncommissioned officers as post school teachers was precluded by the regulations restricting extra duty to private soldiers.

Evaluation of extra-duty teachers indicated that at least half of them were unfit for this work. The selection process left much to be desired. Unenthusiastic commanding officers often chose as teachers men they wished to compensate for other work performed. Lieutenant John L. Sehon, 20th Infantry, complained in 1892 of one man being detailed as teacher as compensation for clerical work done in the adjutant's office, a clerk not otherwise being authorized.²⁰

The chapel at Fort Concho, Texas, served as the school house, though the schoolmaster was hard to obtain, on one occasion being ordered into the field for an expedition. Some soldiers did not welcome assignment as teacher, even if qualified. At Fort Laramie, one such unhappy teacher got drunk and purposely lost his job. At Fort Bridger, Wyoming, classes were often cancelled because the teacher was drunk. At Forts Grant and McDowell, Arizona, the post schools were forced to close in 1884 because the teachers deserted. In 1889, two teachers in the black 9th Cavalry Regiment, while under the supervision of Chaplain Henry V. Plummer at Fort McKinney, Wyoming, wore iron ankle shackles as they taught, to prevent them from any further attempts at desertion.²¹

The role of teacher as established by General Orders 24 was the embodiment of many of the problems that beset the rank and file. As an extra-duty private, the teacher made more money than many noncommissioned officers, and was the nominal authority figure to both noncommissioned officers and privates in the classroom while being on familiar terms with them outside. Usually exempted from other duties, it was feared that teachers and other extra duty men might form an "aristocracy of wealth and leisure," standing to one side while other soldiers 'soldier,' and that they would "shrink from hardening their hands," if made to stand in the ranks once or twice a week.²²

In dealing with noncommissioned officers as students, the teacher's position was "somewhat anomalous, for, while [he] instructs non-commissioned officers, he is at the same time subject to their orders," complained Second Lieutenant John A. Lockwood, 17th Infantry, in 1881.²³ For those who wanted to change this situation, the logic of the teacher having the rank of noncommissioned officer and being a member of the post noncommissioned officer staff was compelling. In 1885, Lieutenant General Philip Sheridan, Sherman's successor as Commanding General of the Army, placed himself squarely behind this position with equal result.²⁴

The expedient of using qualified civilians became a short-lived option for commanders. The practice of hiring civilian surgeons seemed adequate precedent for those commanders who desired to contract qualified civilian teachers. Paying them presented a problem, however. In 1883, three posts hired civilian teachers at a compensation of \$50 per month, paid for by the officers and enlisted men. Some posts simply hadn't any men qualified or eligible to perform the duty of teacher. As ordnance soldiers were excluded from being placed on extra duty by regulation, the commanding officer of the Watervliet Arsenal had a night school for soldiers in operation under a hired teacher paid from the profit of the post bakery. The use of the post fund for such hiring was ruled

unauthorized, however, as the commanding officer of Fort Selden, New Mexico, was promptly informed upon enquiry of the War Department.²⁵

The president of a civilian normal university of 2,400 students suggested the hiring of graduates for one enlistment. Such men would have been most satisfied with the pay of a noncommissioned officer, teaching being notoriously poor paying. But then, teaching was rarely entered into as a permanent profession, even by normal school graduates. No doubt, one enlistment as a noncombatant noncommissioned officer would have been tempting to many normal school graduates. The romantic appeal of the frontier was a strong element in the national culture. "I think that you could get teachers to enlist for three years at \$36 per month" [equivalent to the pay of a Hospital Steward first class], he claimed, "by having furnished quarters, fuel, light and clothing, providing they do not have to do military duties."²⁶

Some officers encouraged the notion, suggesting the teachers be attached to the hospital corps for muster and treated as members of the post noncommissioned staff. "There are hundreds of young men and women in the East graduating from colleges every year who would be glad to go to these military posts as teachers, simply for their quarters and fuel and \$50 per month," one suggested. He characterized them as ideal candidates, for "having adopted

the profession, [they] would keep touch with the teachers of the outside world, and thus march along with the advancement made in the system of education."²⁷

Military educationists responded to the lack of competent teachers by suggesting that the position of schoolmaster be made a military specialty with appropriate rank and training. An ordnance sergeant, quartermaster sergeant, commissary sergeant and the hospital steward would normally be found at each post. These noncombatant post noncommissioned officers were neither members of the staff nor the line, but each reported directly to his own particular bureau. They were specialists, highly literate of necessity, as they were charged with keeping records on each unit that passed through the post, as well as accounts and reports on the property under their charge, and tended to spend long years of service at one post. The ordnance sergeant at Fort Laramie in 1879, for instance, had served there continuously for the past thirty years.²⁸ Self-improvement through reading and study or attendance at civilian schools, where possible, was not uncommon among this group of men. Such was the case with James A. Egan, who enlisted in 1881 for a five-year stint with the 8th Cavalry. Upon reenlisting in 1886, he was appointed post quartermaster sergeant at Fort Sheridan, Illinois. There he served until being discharged in 1891, after eleven years' service, in order to pursue medical studies begun

while on a seven-month furlough.²⁹

3. Recommended Noncommissioned Schoolmasters

In 1880, Colonel McCook recommended the enlistment of 150 qualified men to act as schoolmasters with the rank and pay of commissary sergeants. This proposed addition to the post noncommissioned staff might "take charge of the post library, and become responsible to his commanding officer for the school and library property," rationalized McCook.³⁰ An editorial in The United Service urged Congress to follow this recommendation, and in so doing, "remove what is now the most serious obstacle to the full success of the system - the want of competent instructors. Such a body, organized under the supervision of post commanders, would soon place our system of army education on an enduring basis, and achieve results that would amply repay all that it would cost." Chaplain Mullins and the Secretary of War added their voices to this appeal.³¹

A bill that embodied all of these suggestions was finally introduced in the House of Representatives and reported to the Military Committee. Heartened by the proposed legislation, Chaplain Mullins added some suggestions of his own. Firstly, that the "rations of one school teacher at each post (for the present) be commuted

at one dollar a day, a room and fuel thereof be allowed him, and he be given some distinctive uniform," For the general improvement and standardization of instruction, he suggested "a modest normal school or class," at the recruit depot at Jefferson Barracks, Missouri, an idea originally espoused for the recruiting depots at Columbus, Ohio, and David's Island, New York, in 1878, but never carried out.³²

An obvious enthusiast for any proposal to create another post noncommissioned officer was Quartermaster General Holabird, the man in charge of all post property in the army. Accountability was his main concern and, to date, no one was easily held accountable for the school rooms and libraries. Not content with the proposed noncommissioned officer to be assigned to each post as schoolmaster and librarian, he lobbied for a detailed assistant:

Nearly every post can turn out some curious bookworm, who would meet all the requirements as such an assistant. He must be courteous and communicative, - one whose presence and talk to soldiers is as good as a story-book. There are many such characters in the army, and by transferring, they would be made to fall into the right places.³³

In keeping with Quartermaster General Holabird's sensitivity to the need for noncommissioned officers to be educated as noncommissioned officers, in 1882 he insisted that all instruction given enlisted men, whether academic or professional, should be imparted by, or under the

direction of, their officers. Anything that tends to weaken the influence of their officers must in the nature of things be bad," he warned. Indeed, officers had been intended for such duty by the original legislation of 1866, but opposition on their part made the War Department reluctant to force the issue.³⁴

A strong advocate for professional military instructor was found in the Adjutant General Drum. Having entered the service as a private with the 1st Pennsylvania Volunteer Infantry during the Mexican War, Drum had a better understanding of the men in the ranks than most officers. Neither had he attended the Military Academy, but had been educated at the county academy and Jefferson College, Philadelphia.³⁵ He found no small fault with the chaplains who, he allowed, might "manifest laudable zeal" in the education of soldiers, but could never be "productive of the greatest good." Although they might be knowledgeable and of high moral tone, "their sphere is spiritual," while "the possession of knowledge does not necessarily carry the gift of imparting it." For Drum, as for many others, the teacher needed to be a soldier of elevated station:

The successful teacher of soldiers must himself be a military man, intimately acquainted with their wants and aspirations, the exactions and requirements of army life, and, in other words, must not only be with them but of them. To compel the respect and attention of their pupils, teachers should have adequate rank and

compensation and not be required to share the common mess-rooms and barracks, nor should their position be affected by changes in the garrison.³⁶

In 1883, Drum further recommended that teachers should not be members of the company or regiment in which they teach: "Soldiers will be slow to obey or respect a teacher whose position in quarters is possibly inferior to theirs, and it is demoralizing in the extreme when they find that their voluntary studies must be relinquished for a time because their instructor (superior to them in acquired knowledge only) is undergoing merited punishment in the guard-house, possibly for drunkenness."³⁷

Adjutant General Drum's sentiment that teachers should be from outside the company and regimental organization was shared by other officers. To them, the teacher should be a permanent member of the post noncommissioned staff, as was the hospital steward, ordnance, commissary or quartermaster sergeant.

By 1891, the movement to create 150 teachers to be placed on the post noncommissioned staff was, meanwhile, still before Congress, twelve years after it was first suggested. The notion had one last champion in Adjutant General Drum's successor, Brigadier General John Cunningham Kelton. During his last year as adjutant general, Kelton asked once again that the Congress authorize the 'post school teacher' and to provide for each teacher the pay and allowances of a hospital steward. Kelton described to the

Congress a suggested rigorous examination before a board of officers prior to appointment of each teacher by the Secretary of War. He explained that this legislation would serve as "a great inducement to the well-educated enlisted men, and sufficient to insure applications for appointment from well-educated young men in civil life competent as teachers."³⁸

The New York Times endorsed Kelton's plea by remarking on the provisions in the British service for such noncommissioned officers:

The British service, which pays great attention to army schools, in order that 'the opportunity of acquiring a sound and useful education' may be offered to all soldiers and their children, both enlists especially qualified civilians as teachers, and also transfers competent enlisted men to that corps, as might be done under the bill pending in Congress....General Kelton would have instruction in the lower branch compulsory, but in the higher voluntary, taking two classes, and would have the school term not more than such months of each year which would make the office of post school teacher still more desirable....[He] is convinced that specially trained teachers are necessary to the proper success of the school system, and that 'enlisted men, however competent they may be so far as education is concerned, lack, in the majority of cases, the special and rate qualification necessary to instruct others.'³⁹

But none of these post teacher were recruited, and twelve years later, the posts were still complaining of the lack of qualified teachers. Among the eight posts in the Department of the Colorado, for instance, only one

qualified teacher could be found in 1904. The post commander at Fort Grant bemoaned the unimaginative recitations required by the teachers and restated an old motif in reporting: "This is a vital point in the progress of our schools, a training for this is as important as that for any other profession; in fact, more so, as the teacher must not only be educated himself, but must have an aptitude to transmit knowledge to others."⁴⁰

As for noncommissioned officers, the unhappy circumstance of being under the classroom discipline of a private soldier was made only more grating by the knowledge that the extra-duty private was making more money than was the noncommissioned officer. It was demoralizing to noncommissioned officers, editorialized The United Service magazine in 1893, that as a result of an extra duty assignment, a raw recruit, with perhaps no more than three months service...is thereby enabled to draw more pay than the regimental sergeant major." Good men were even inhibited from accepting the "duties and responsibilities of the non-commissioned officer for the pay at present allowed. An old soldier who is industrious and saving, and probably an artisan, although well qualified, will not accept an appointment [as noncommissioned officer], for the reason that being placed on extra duty at thirty-five cents a day, he will receive more pay than the first sergeant." And as the "veteran first sergeant is a valuable factor in

securing and maintaining the discipline of a company organization, and as a noncommissioned officer has unique and peculiar status among enlisted men, the conditions that have been described do not conduce to the perpetuation of his kind, nor do they make for the best interests of either noncommissioned officer or private."⁴¹

Some noncommissioned officers requested reduction to private for the very purpose of accepting detail as post school teacher. By regulation, a noncommissioned officer was not allowed to be detailed to extra duty "except in cases of emergency without the prior approval of the department commander." Such an exception was made after 1904 in the case of the coast artillery, the sergeants of that branch being allowed detail as post school teachers at \$41 per month compared with the \$26 paid to other sergeants or even the \$32 given first sergeants. But the coast artillery was the most technical branch of the service, containing the best civilian-educated recruits and noncommissioned officers in the entire army.⁴²

Officers publically opposed the scheme to create a corps of schoolmasters on the grounds that it might result in "the attachment to the command of a mere nondescript, neither soldier or civilian."⁴³ But unlike the usual vocal and editorialized opposition to the recommendations of reformers, opposition to the creation of a corps of schoolmasters was more like that of a stone wall. It was

both silent and pure resistance. The reason for this resistance may be found in the conflict of interest such a corps would have presented to the average officer.

This opposition was grounded in the antipathy of many career officers to the enlistment of well-educated men who would be given the rank of noncommissioned officer and thus, after two years' service, be qualified to compete for the annual appointments for those commissions reserved for noncommissioned officers. Such fears were exacerbated when competitive examinations were thrown open to all enlisted men in the 1890s. Any attempts to recruit educated civilians directly into the noncommissioned officer corps were unwelcomed by officers whose sons' career choices were limited to succeeding their fathers by securing appointments from the small number made each year.

4. Commissioning of Noncommissioned Officers

Signing himself as "Siccius Dentatus," one noncommissioned officer lamented on the pages of a journal in 1834 that unlike the armies of England and France, "when a man is promoted to a sergeancy [in the United States Army], he has reached the acme of what is obtainable, according to our military usage, which, in effect, informs him that 'so far shalt thou go but no farther,' and thus

that indispensable connecting link between the officer and soldier in all armies - the sergeant, loses much of its intended good effects, there being no stimulus for further exertion from a hope of future promotion."⁴⁴

Noncommissioned officers were first allowed to apply for commissions in 1837. Eighteen noncommissioned officers had memorialized Congress in January for the right to compete with civilians for commissions. Touted as rewards for merit, it was more likely the case that these commissions were given simply as "a strong incentive to good behavior...by the prospect of a commissioned as a recompense for faithful services," as was the practice in the British army, or more likely as an "inducement to enlist," or possibly in the hope that the army's "morale will be improved by the accession of respectable, well informed, steady young men."⁴⁵ In 1847,⁴⁶ the pressures of temporary expansion of the army prompted the offering of brevet commissions as second lieutenants to distinguished noncommissioned officers upon the recommendation of their regimental commanders. This was the only instance of brevets being given to noncommissioned officers in the history of the army.⁴⁶

An act of 1854 authorized the granting of commissions as second lieutenants to noncommissioned officers who were found qualified by an examining board of officers.⁴⁷ Despite the establishment of a general rule that one-fourth

of the annual vacancies should be filled by noncommissioned officers, the army was reluctant to commission them in any appreciable number except in time of general mobilization. During the Civil War, field commanders were allowed to recruit from the volunteer units for the Regular Army by holding out the inducement of promotion to noncommissioned officer and commissioned grades for "distinguished and meritorious" service. The order instructed commanders to point out to potential recruits "that promotion to commissions therein is open by law to its meritorious and distinguished non-commissioned officers, and that many have already been promoted."⁴⁸

Despite the continuation of general orders directing that one-fourth of the annual vacancies should be filled by noncommissioned officers and the reiteration of the one-fourth formula by the Secretary of War in 1867, between 1867 and 1878, exclusive of West Point graduates, 295 men were appointed to second lieutenancies, of whom only thirty-six - about one-eighth - were promoted from the ranks of the army.⁴⁹ Of this small number, many were the beneficiaries of favoritism, being the sons of 'influential families,' enlisted and appointed through friends to the position of noncommissioned officer "solely with the view to immediate promotion" to commissioned officer.⁵⁰

The continued commissioning of civilians in large numbers, and the abuse by influential civilians of the law

allowing commissions for qualified noncommissioned officers, brought sharp protests from noncommissioned officers and reform-minded officers alike. Fewer young men "of intelligence and ambition" enlisted as the chances of a sergeancy leading to a commission were "just about none at all," remarked General E. O. C. Ord in 1872.⁵¹

In response to this criticism, an attempt to exclude all civilian appointments was made in 1876 by Representative Henry Banning of Ohio in his bill H.R. 2264. Banning's bill would have limited appointments to Military Academy graduates and noncommissioned officers of the army in the grade of first sergeant. The bill did not pass.⁵²

Another attempt to rectify this situation was made by an act of Congress of June 18, 1878. Following the recommendation of the Commanding General, William T. Sherman, along with the hearty endorsement of Representative James A. Garfield on Capitol Hill and in the civilian press, the act gave priority for promotion to meritorious noncommissioned officers who had rendered outstanding service for no less than two years, immediately after the graduating class of West Point, in filling vacancies. Unlike the rest of the act, this provision received bipartisan support. Company commanders were to recommend eligible noncommissioned officers to the regimental commanders, who would then submit the names to the department commander who would convene an annual board

of five officers to examine the candidates. The report of the board would be forwarded to the Secretary of War. Subsequent orders limited candidacy to unmarried noncommissioned officers between the age of 21 and 30, and stiffened the examination by the addition of logarithms, algebra, plain and solid geometry, and elements of trigonometry and international law. By way of an attempt to boost the morale of those noncommissioned officers selected, along with those who aspired to selection, the army authorize those meritorious noncommissioned officers officially designated as candidates for commissions to wear a stripe of gold lace on each sleeve of the dress coat in recognition of their achievement.⁵³

From 1878 until 1892, the percentage of commissions from the ranks rose to over 30 percent - 126 out of a total of 366.⁵⁴ Of these commissioned former-noncommissioned officers, most had enlisted "for the sole purpose of winning commissions."⁵⁵ The character of such men being in doubt, in November of 1889, requirements were tightened when examining boards were required to "inquire with great care into the moral character of candidates for promotion." The revision was attributed to Adjutant General Kelton, who was trying to recruit a better class of men.⁵⁶

But this incentive for noncommissioned officers did not last long. In June of 1892, the Congress opened the door to being examined for commissions to all enlisted men.

The new law - sometimes known as the soldier's 'Magna Charta' - also enabled the soldier to initiate the application himself, rather than being dependent upon the recommendation of his commanding officer. For those who passed their department's board, there was added a final competitive examination at Fort Leavenworth.⁵⁷

The true beneficiaries of the 'Magna Charta' were not only the common soldiers but the sons of officers who now enlisted in large numbers in order to take advantage of the liberality of the law and the certain favoritism of their fathers' brother officers.⁵⁸ Major George W. Baird of the paymaster's department, himself a 'ranker,' having served as a private in the volunteers from August 25, 1862 to March 14, 1864, claimed in 1893 "that a considerable number of young men of excellent standing, such as sons of officers, now enlist and earn their commissions by service and hard study in the ranks."⁵⁹

Indeed, the law was seen as a "backward step" for the career development of noncommissioned officers.⁶⁰ It was also argued that the act could not "have much effect in practice, from the fact that any man so equipped as to be at all likely to undertake the examination must, almost inevitably, have become a non-commissioned officer before serving two years. Company commanders are seeking for such men to place chevrons on...", Baird pointed out.⁶¹ Other than a brief respite during the Spanish American War, a

more meritocratic process would have to wait until the next century when the mass armies of the World Wars allowed for large numbers of company grade officers as had happened during the Civil War.

5. Education of Officers' Sons

A commission was the highest goal to which many officers' sons could aspire. Lacking political connections they could rarely hope for a direct commission or acceptance at the Military Academy. Enlisted as privates, they were speedily promoted to noncommissioned officer and, upon two years' service, promptly requested their commanding officers to recommend them for commissions. That their chances for success in competitive examinations against other noncommissioned officers would be much better than against the proposed noncommissioned schoolmasters, however, was obvious.

The schooling of officers' sons was often interrupted by moves from post to post and limited by the poor quality of the schools found on or near such posts. If the post was in such a remote area as the desert, instruction was impossible unless left to the mother who, more often than not, was poorly fitted to the task.⁶² When there was a school on post, separate instruction was arranged, if

possible, so that officers' children would not have to attend classes with those of the enlisted men and lower ranking civilian employees. Even though the number of children at Fort Laramie was not large in the early eighties, separate instruction was held.⁶³ During the same period of time, a retired officer taught the children of officers and civilian employees at the military Academy at West Point, receiving from the "officers' private pockets one thousand dollars per year."⁶⁴ Where separate instruction was not possible, the army regulation that finally made education of enlisted mens' children compulsory allowed officers to elect to keep their children home "for certain wise reasons."⁶⁵

Major William H. Powell, 22nd Infantry, expressed the frustration of those few fortunate officers who could afford to send older children away to school, where they found other children of their own age "far in advance of their standing," while many of the boys were denied admission to institutions from which their fathers had graduated "for lack of the most ordinary common-school knowledge."⁶⁶

The enlistment of educated civilians directly into the noncommissioned officer corps as schoolmasters must certainly have been less than appealing to career officers for fear that they would monopolize the few commissions given to the noncommissioned officers of the army each

year. Such a situation was precluded in the English army on account of the purchase system, not abolished until 1870, and the exorbitant expense of the officers' mess which kept those officers without an outside source of income permanently in debt, and dampened the ambition of all but the most determined noncommissioned officers from desiring promotion from the ranks.

President Harrison made matters more difficult for officers by supporting legislation to make appointments meritocratic by requiring competitive examinations of candidates for appointments to commissions. House Bill No. 477 of 1890, which embodied this reform, threatened to exclude the ill-educated sons of officers from acquiring commissions by enlistment. General Howard complained angrily to Senator J. R. Hawley of the prejudice this bill held against the sons of officers.

They are constantly changed from place to place, so that regular courses of study are interrupted. Their boys are naturally inclined toward Army life so we find Army Officers always seeking Army appointments for their sons. This is natural. The House Bill #477 cuts them off from appointment. True, the President's cadetships [at the Military Academy] averaging about three a year are open to them as they are to all the world. This makes the chances too narrow. Do you think it would be unfair to embrace the sons of Army Officers in the classes to which this bill restricts appointments? You can see only these young men are at a disadvantage in this competition through none are better fitted by education from childhood to do good substantial service.⁶⁷

Howard confided to his oldest son Guy, then serving as a first lieutenant with the 12th Infantry, his fear concerning the deleterious effects the proposed competitive examinations would have on the aspirations of officers' sons. Howard implied that such a law might encourage the enlistment of ambitious, civilian-educated men. Officers' sons, he remarked to his son, were "apt to be limited in their knowledge of geography, English grammar, rhetoric and history," the very subjects "in which other Young Men excel, especially, Young Teachers of Schools."⁶⁸ This frank admission offers one certain reason for the lack of interest on the part of career officers in enlisting educated men to serve in a teachers' corps with the rank of noncommissioned officer; such men would be competing with their sons for the covered commissions remaining after each graduating class from the Military Academy took their appointments.

Howard knew of what he spoke. He had secured civilian appointment for his oldest son, Guy Howard, in 1876 from then President Grant. After attending Philips Andover Academy, and much to his father's displeasure, Guy chose Yale over Bowdoin College.⁶⁹ The year 1890 found Howard dutifully attempting to acquire an appointment for his youngest son, John. Howard discussed the matter personally with President Harrison. As both men were concerned that the appointment be made "legally," Howard

had his son enlist in the National Guard of the state of New York. Upon his promotion to corporal in Company 'G' of the 12th Regiment, Howard made application in writing to the president. On the same day, he wrote a mutual friend, James A. Blain, Harrison's Secretary of State, to ask his help in urging the president to make the appointment.⁷⁰

6. Disaffection

In 1887 Colonel Richard I. Dodge put into words what so many were thinking. "Within the last five or six years," he wrote, "a few prominent men have mounted the army educational hobby, and by dint of vociferous 'tally ho's' and persistent lung-work have 'run to earth' an educational something, so diminutive as to excite only ridicule."⁷¹

Little enthusiasm remained for the post schools by the last decade of the century, even among formerly ardent supporters, and most importantly, among post commanders, the men whose will motivated and directed the lives of the garrison residents. It was not for lack of interest in the education of soldiers and noncommissioned officers that the reformers became dissatisfied, but rather for the proven failure of the schools to succeed in the mission given them. At the heart of the problem was the failure of

the War Department to establish a centralized system of education and to hold the divisions and their departments accountable for its implementation. The country was divided into territorial divisions - the Atlantic, Missouri and Pacific. Each division contained several departments, each comprised of several states or territories. Any serious attempt to regulate the post schools needed to utilize that chain of command.

After the want of competent teachers, perhaps the greatest impediment to the creation of such a system of education would have been the need to authorize a bureau of education to perform the administration, supervision and inspection functions necessary for its operation. A likely bureau to supervise the task of enlisted education would have been the Quartermaster Department as it was already charged with the physical property of the schools, chapels, reading rooms and libraries, and the books and supplies for use by the soldier students. But that was not to be.

The creation of the office of Officer in Charge of Education in the Army might appear to have been a neat compromise. Without bureau status the chief education officer was fairly impotent. That Colonel McCook was the first appointee to the position underscores the impotent nature of the task; it was simply another assignment within the context of his duty as aide-de-camp to the Commanding

General, William T. Sherman. Sherman was a man at war with the bureaus and with the Secretary of War in particular, the only man to whom each bureau chief alone felt responsible.

What alienated progressive officers from supporting the creation of an education bureau might well have been that the three men who succeeded McCook in the officer were chaplains. Chaplains were considered as being generally incompetent by even the most progressive of the reformers. Well aware that the chaplains were lobbying for a chaplain's bureau, reformers must have feared that the creation of a system of education would only further that cause as they were already superintendents of education at most posts and had inherited the position of Officer in Charge of Education in the Army.

Events of the decade were to improve, somewhat, the mission of the schools, however. In 1895 the prayers of reformers such as General Drum, that the role of chaplains be curtailed, were answered when a regulation was issued which left the superintendency of the post schools to the discretion of commanding officers, therefore displacing those chaplains deemed inadequate by post commanders.⁷² Yet most commanding officers, possibly from indifference to the education of their soldiers, continued to rely upon the chaplains for such superintendence.

Disagreements continued into the new century. Yet

agreement could be found on one issue; the post schools were a failure. After the turn of the century, nothing contributed more to that failure than the success of the common school movement in civilian society and the inability of the military to equal the standards of the civilian schools. Progress in imparting the rudiments of a common school education would not prove to be as successful with adults as with children. The demands of a short service army compelled even the most progressive officers to rethink the very rationale for the existence of the schools. Perhaps the schools were, as the New York Tribune characterized them "a beneficent theory, calculated to popularize the military establishment, that the regular army at least in time of peace, should contribute its mite [sic] toward general public education." Such idealistic notions had been held by a few of the reformers since the beginning of the schools in 1866.⁷³ Over the years, that idealism tarnished much as did the gold braid on their dress uniforms.

On the other hand, the increased need to teach professional military subjects forced the issue of the very purpose of education in the Army. In 1905 Major General Samuel S. Sumner, commanding officer of the Pacific Division, asked rhetorically whether the Army was "a kind of common school for the soldier," or was instruction to benefit the soldier and the service professionally. "For

many years past," he noted, "the soldier received an education gratis in the Army, which was supposed to make it an inducement to enlist and at the same time improve him as a citizen," a strategy inconsonant, in Sumner's opinion with the training demanded for modern warfare in an army composed of short term soldiers. Although he took heart that the newly created General Staff appeared to favor the instruction of soldiers in professional subjects only, he complied with General Orders 124, July 28, 1905, in which the War Department outlined the uses of post schools, by issuing an order strictly regulating those post schools under his command. Commanding officers of each post were directed to detail an officer to supervise instruction. While attendance was voluntary with the exception of those directed to attend by the post commanders and subordinate commanders, once beginning the course, all enlisted men were compelled to complete the entire term.⁷⁴ Like so much other obsolescent equipment, the post schools ran on, driven by a combination of inertia, necessity, and bureaucratic directives.

THE NONCOMMISSIONED OFFICERS' SCHOOLS

The interest shown by the more progressive reformers in noncommissioned officers was an indication that they understood the importance of that group to their overall call for reform of the army on a professional model. "If the commissioned portion is called the brain of the army," they rationalized, "then the noncommissioned part may be likened to the skeleton, and it must be well formed and developed from good material or the whole physique will be of little utility."¹ The paternalism of the military extended to enlisted men in general and did not consider the noncommissioned officer-as-noncommissioned officer, while resisting their use as 'middle management.' As most officers by the last quarter of the nineteenth century were paternalistic to some degree, one way to distinguish the more progressive among them might be to qualify the impulse to their paternalism as 'professional' in nature.

The phrase 'professional paternalism' has been coined by Lawrence B. Radine to describe the peculiar style of control used by the United State Army. He defines it as the "use of certain techniques to build subordinates'

commitment to the organization, a sense of belonging, a sense of the overall worthwhileness of organizational objectives and a belief that the organization is taking care of the individual."² Such techniques include manipulation , persuasion, and group consensus. The goal of professional paternalism is a military unit with a high degree of esprit de corps, discipline and proficiency. The morale of the individual soldier is the focal point in this style of leadership and incentive is the motivating factor.

As an elitist style of leadership, it cultivates a clear class separation between officers and enlisted men. Noncommissioned officers are extensively used as an intermediate level of authority in the same way industry uses working-class supervisors as a layer or buffer between management and labor.³ Since soldier morale is the crux of professional paternalism, noncommissioned officers are the key to that system as they are closest to the soldiers and of the same social origins. Indeed, they function as assessors of the soldiers' morale.

The precondition for a professional education for the noncommissioned officers of the army was a sound general education. Those officers who espoused a role for noncommissioned officers as supervisors, technicians and small unit leaders, understood the necessity of laying the ground work of a common school education. They also pressed for better pay and conditions of service. But a

general education was, of necessity, the bedrock of professional development for the noncommissioned officers of the line of the army.

1. Noncommissioned Officers and the Post Schools

Perhaps the most important function of the post schools, as far as the reformers were concerned, was "to produce efficient non-commissioned officers." In 1880, while still Colonel McCook's assistant, Chaplain Mullins observed that "there is, indeed a surprising number even of our non-commissioned officers, the sum of whose literary attainments may be expressed by their elaborate signature. They cannot repeat the multiplication table, know nothing of the history of the United States, cannot study the 'Tactics,' and of course, in any, even the direst emergency, are unable to receive written orders and instructions." The next year he recommended the adoption of an army-wide standard for the education of noncommissioned officers and compulsory schooling for those who could not meet the standard as measured by examination.⁴

Surprised to find sergeants who could neither read nor write, Secretary of War Robert T. Lincoln also suggested the schools be turned to their improvement the next year:

A mighty forward impulse would be given to the schools could the standard of

attainments necessary for the non-commissioned officers be elevated; and it is respectfully recommended that a standard of education for non-commissioned officers be adopted, and then that all corporals and sergeants be compelled to attend school until educated up to that standard, or be required to show certificates witnessing that they have passed a satisfactory examination upon the prescribed standard....The advanced science and art of modern warfare surely demands a higher standard, since the requisite quick intelligence and sound judgement cannot be expected, as a rule, of the ignorant....I am well advised that the majority of the superior officers of the Army would favor the adoption of some standard which would insure a higher order of non-commissioned officer, and the latter would be well pleased with the consequent increase in dignity and honor of their very honorable and important position.⁵

One year later, quartermaster General Holabird pointed out the failure of the schools to educate noncommissioned officers-as-noncommissioned officers. Classes in reading, writing, arithmetic and history needed to be supplemented by professional instruction in their duties, such as the preparation of muster rolls, morning reports, company property returns, along with professional recitations in the tactics. In Holabird's estimation, the army should neither "shut up our young soldiers as we do scholars or monks, nor make those who have to labor daily pursue a course of study unless they wish to." He reasoned that noncommissioned officers needed time to study and write, as well, and to that end argued that the first sergeant should be provided with a room to himself and other

noncommissioned officers "be allowed one room to every two of them."⁶

Artillery officers also supported the issuance of a certificate for noncommissioned officers but stressed the need for practical and useful information. Despite the general misconception of the average soldier of the line of the army "that artillery non-coms [sic] were never happy unless juggling with figures or reading scientific books," it was patently obvious to artillery officers that many of their noncommissioned officers possessed "little or no skill in the ordinary and fundamental operations of arithmetic to include fractions." It was suggested that the post schools should be used to correct this deficiency.⁷

A consensus was forming among officers that the failure of the schools might be placed ultimately on the nature of their instruction, theoretical as opposed to practical. The army wanted soldiers, not 'book men' in their estimation. 'The three R's' should not be a concern for the army except in the selection of recruits they argued, but not after they were enlisted. Theoretical instruction was held to be especially demoralizing for noncommissioned officers. The reality that "men do not enlist to be sent to school or to acquire an academic education," was a lesson all too obvious to many officers.⁸

The most compelling rationale for both the general and

the professional instruction of noncommissioned officers resulted from the new tactics inspired by the innovations in technology in the last half of the century. Europeans led the way in the general and professional instruction of their noncommissioned officers by virtue of their possessing the most technologically advanced armies of the day. As regular army officers studied the new tactics of the Europeans, prominent European tacticians came into vogue. One such Prussian tactician, Lieutenant General Albrech von Boguslawski, gained wide recognition because of the English translations of his writings, and their publication in both England and the United States.

Boguslawski understood full well the importance of a general education to the noncommissioned officers of a modern army. He gave the French credit for making "a favorable change in the...army since 1871 by...devoting more attention and care to the instruction of their people." Having given the French their educational due, Boguslawski concluded that Germany had the educational edge, however, having "had the start of them in national education through an experience of almost eighty years of general military service, at least in old Prussia."⁹ Boguslawski preached a doctrine for the need of the infantryman to be even better educated and prepared than the technical specialists of the so-called 'learned arm,' the artillery. "The wavering infantry struggle is

constantly changing its character," argued Boguslawski, "and it frequently becomes necessary for the individual man to act upon his own judgement and responsibility."¹⁰ The need for old and experienced men from which to select qualified noncommissioned officers led him to oppose the three-year term of short service, to scorn the rot caused by the democratic socialists, and to call for an increase in the number of noncommissioned officers.¹¹

United States Army officers who espoused the professional instruction of their noncommissioned officers were compelled to admit the need for a sound general education as a precondition to any such professional instruction. First Lieutenant Harvey C. Carbaugh, 5th Artillery Regiment, argued in the pages of the Journal of the Military Service Institution of the United States in 1890 that "the main object in view in the instruction of non-commissioned officers in subjects other than purely military ones is to make possible a more perfect military education, for as Boguslawski says: 'The education of a nation in general, and its military education in particular, are the sources of the tactical efficiency of an army'."¹² And Captain Edmund Zalinski, a progressive artillery officer of twenty-five years service, predicted the same year that "successful action will in the future rest more than heretofore on...non-commissioned officers....To them must be given a greater degree of

consideration and authority."¹³ That both Carbaugh and Zalinski were artillerymen is significant; the infantry and cavalry were not only hidebound technologically, but tactically, as well.

Even at the highest echelons of command, the notions implicit in the newly evolving tactics began to be recognized. In 1892, the Commanding General, Lieutenant General John M. Schofield, quoted a junior officer's report concerning the education of noncommissioned officers under his charge at Fort Meyer: "The modern tendency of individualizing the soldier, together with the adoption of a looser formation in tactical dispositions, have led the French and the German authorities to require more from their noncommissioned officers than a mere knowledge of drill regulations."¹⁴ The officer went on to propose the preparation of a manual adequate to the needs for the instruction of noncommissioned officers in their role in these new tactics.

2. The Noncommissioned Officers' Schools

The crux of the problem concerning the education of enlisted men, as it developed over the years of the operation of the post schools, became whether academic proficiency alone should be a suitable goal for the

education of private soldiers, that body from which the future class of noncommissioned officers would be promoted, or for the noncommissioned officer corps itself. Commanders in the field became more inclined to hold regular classes in military subjects for noncommissioned officers and selected private deemed candidates for promotion to noncommissioned officer. Such a class met each Tuesday night from 6:30 until 7:30 p.m. at Fort Meade, Dakota Territory in 1887.¹⁵ It would be under Major General John McAllister Schofield, Sheridan's successor as Commanding General of the Army from 1888 until 1895, that the professional instruction of the noncommissioned officers of the army would finally be provided for. Less than four months after Schofield assumed command, the War Department mandated the instruction of noncommissioned officers at the company, troop and battery level with the publication of General Orders 105, on December 4, 1888. Captains commanding these units were formally given the responsibility for such practical and theoretical instruction. Classes were ordered to be held "at least twice each week from October 1st to March 31st of each year." Such classes were to "be regarded as strictly military duty," and not to be conducted during the noncommissioned officers' free time. Instruction at Fort Meyer, Virginia, for instance, was given twice a week, on Tuesdays and Thursdays, from 10:45 until 11:45 a.m.¹⁶

Success in such programs was inhibited by several factors. The lack of a standardized course of study for noncommissioned officers, one prescribed by the War Department, was seen as a major shortcoming. The sketchy guidance given by the War Department mentioned simply the drill regulations "and such other military books of authority, or upon such military subjects as may be prescribed by the War Department, upon the recommendation of the General commanding the Army."¹⁷

In 1888 the adjutant general ordered all noncommissioned officers of artillery, a branch rivaled only by the engineers as the most scientific and advanced branch of the military, be taught "the principles of graduating sights, pointing guns, and mortars, and the causes that affect the flight of the projectile, especially those due to improper loading, the rifling, and the wind." The next year a general order outlined a comprehensive list of subjects in which all artillery noncommissioned officers should be instructed.¹⁸ But captains of infantry and cavalry had to improvise as best they could. The drill regulations, minor tactics and small arms composed the general topics taught in most curricula for the noncommissioned officers' schools.¹⁹

The lack of textbooks written by American officers was reported to be the main hindrance to the proper instruction of noncommissioned officers in the post schools.²⁰ Some

textbooks soon began to appear. Written by thoroughly professional officers, these manuals reflected the reformers' belief "in the idea that a greater responsibility will fall to the lot of the sub-leaders and that greater judgement, greater knowledge and higher personal qualities must be theirs if the results of future struggles is to bring the hoped for success."²¹ The year 1890 saw the publication of two textbooks to that end.

A Course of Instruction for Non-Commissioned Officers, by Captain Harvey C. Carbaugh, 5th Artillery, was deceptively named as it was intended for noncommissioned officers of artillery, no more than thirty-six of its two hundred and ninety-six pages being useful to the instruction of infantry and cavalry soldiers. It was even printed on the press of the Artillery School at Fort Monroe, Virginia. About a quarter of the text covered algebra, geometry and logarithms, while half the book dealt with physics, to include instruments, electricity, bodies, power and machines. The last four chapters briefly discussed the laying of guns, reconnaissance [sic], cover, and military engineering. More generally useful subjects to noncommissioned officers of infantry and cavalry, such as guards, defense, reconnaissance and topography, were treated in Practical Information for Non-Commissioned Officers on Field Duty, by Major Guy V. Henry, 9th Cavalry. But Henry's book was quite brief, being only fifty-five

pages in length.²²

A third weakness presented itself in the indifferent and arbitrary talents of the already-overburdened junior officers detailed by their captains as instructors. As Colonel Henry Whitney Closson, 4th Artillery Regiment, pointed out in 1894, hearing the noncommissioned officers' recitation was but one of the myriad extra duty assignments performed by lieutenants, to include, officer of the guard, auditor, controller, and membership on the company council, court martial boards, and boards of survey. It was terribly inefficient as well, for there were as many officer instructors as there were companies. One officer per post would have been sufficient had all the noncommissioned officers of each company been consolidated for their classes. The result of such a consolidation would have caused a higher tone and quality of instruction, argued Second Lieutenant George W. Read, 5th Cavalry Regiment, in a prize winning essay of 1889.²³

Throughout this period, noncommissioned officers continued in attendance at the post schools, as well. While the attainment of literacy or a certificate of completion from the post school was seen by General Schofield as valuable in itself for noncommissioned officers, such an accomplishment by no means established "a claim for promotion to that class," as he pointed out in 1891. Men were selected as noncommissioned officers

because they were found to be "possessing in a high degree courage, honesty, fidelity, force of character, and a natural tact and ability in controlling men," he noted.²⁴ The commanding general's remarks underlined the perceived need for the schools to be more than mere dispensers of literacy, computational skills and scientific knowledge. Schofield wanted to see the schools become a part of the selection process for noncommissioned officers and offer the professional preparation such candidates needed.

Schofield was as much a friend to the general education of soldiers as was Garfield, McCray, Howard, or Upton. His own early education was similar to theirs as well. The son of a Baptist 'home missionary,' Schofield recalled being educated in the "excellent public schools [of illinois] where the rudiments of English were taught with great thoroughness...." And at seventeen, he "taught district school in the little town of Oneco." Returning to the study of Latin, his life was set on a new path when a vacancy for the military Academy in his district opened in 1849. As with Howard and Upton, Schofield's years at that bastion of religious skepticism on the Hudson would find him in weekly fellowship with a small group of Bible students.²⁵ But as commanding general from 1888 until 1895, the need for the professional preparation of noncommissioned officers was more immediate to him than to any of the others. And unlike many former commanding

generals, in Redfield Proctor, Schofield was blessed with a Secretary of War who shared his professional reforming ideas. The combination of these two like-minded men along with the technological improvements in the weaponry and equipment of the army and new tactics consequent from those changes, created the conditions in which the professional education of noncommissioned officers could be added to the general education of the post schools.

The noncommissioned officers' schools muddled through until the Spanish American War, a period that marked a turning point in American military thinking. By a general order of 1900, captains were reminded of their duty to give careful attention to the instruction of their noncommissioned officers for the rather pragmatic reason that they "are the exemplars of the enlisted force of the Army, and establish and maintain very largely its tone and character." Captains were also instructed to select intelligent men for promotion to the rank of noncommissioned officer.²⁶

After the turn of the century, noncommissioned officers were needed in far greater number than in past. In February of 1901, Congress authorized the largest peacetime expansion of the Army in United States history, more than doubling the size of the pre-war force, in response to overseas commitments as guardians of expanding possessions and the introduction of new weapons systems,

particularly in coast defense. The addition of five regiments each of infantry and cavalry greatly increased the number of line noncommissioned officers while the reorganization of the artillery into a 'corps' of thirty batteries of field artillery and 126 companies of coast artillery meant the addition of large numbers of technical specialists in the noncommissioned officer grades. A trend away from purely military occupations toward civilian type occupations, such as electricians, mechanics, technicians, clerical and service personnel, was well underway.²⁷ The implications for the education of noncommissioned officers were becoming obvious to even indifferent officers.

By a general order of 1903, noncommissioned officers were ordered to attend the noncommissioned officers' schools during the four months beginning December 1, 1903, and ending March 31, 1904. The curriculum was now expanded beyond the drill regulations to include guard duty, the elements of topography, and the Spanish language.²⁸ Hailed by one reviewer as an aid in simplifying the instruction of the noncommissioned officer for the company commander and his subordinates, a Handbook for Non-commissioned Officers of Infantry by Captain Merch Bradt Stewart, 8th Infantry, was published that same year. A "neatly bound book of 102 pages, convenient to carry," it was intended for use in the noncommissioned officers' schools by "newly appointed and inexperienced" noncommissioned officers. Besides the

various regulations and tactics, Stewart's little book outlined the many duties noncommissioned officers were obliged to perform by unwritten tradition, such as the numerous reports and returns. Even naval officers found it to be useful in the instruction of the petty officers of their own service.²⁹

Yet commanders still lacked sufficient "books of reference on military subjects and other practical sciences," which the texts written for noncommissioned officers were meant to supplement, not replace.³⁰ The schools seem to have been compliantly maintained in accordance with department commanders' orders, although post commanders frequently complained of the interference of the noncommissioned officers' duties with their attendance at classes. This was reported to be particularly the case at artillery stations, where undermanning was usual.³¹

The more experience gained by officers in conducting classes for the noncommissioned officers, the less they came to rely upon the old method of recitation. Illustration, demonstration and discussion, particularly when veterans were in the class, became the rule, while theory was kept to a minimum, and when used, followed as soon as possible by practical work.³² Upon successful completion of the course of instruction, certificates of proficiency, signed by the company commander, or staff

officer, were furnished each noncommissioned officer.³³

Although consolidation of noncommissioned officer classes was still being suggested, even to the level of departmental schools, regulations continued to hold each company commander, or staff officer in the case of noncommissioned officers on battalion and regimental staff, accountable for the education of their noncommissioned officers.³⁴ The trust and confidence of the War Department continued to be placed in the 'captains' schools,' and upon each captain, who was officially considered to be best fitted for the task of educating the noncommissioned officers in their professional duties, based upon his own experience and military education.³⁵

3. Education for Professionalism

The Civil War did more than turn the thoughts of reform-minded officers and civilians toward the need of enlisted men and noncommissioned officers for the rudiments of a common school education. The unprecedented mobilization of volunteers from the various states was plagued by the indifferent and unprofessional character of the junior officers elected by the men of each unit. The war behind them, reformers placed high on their list of priorities the professional preparation of a cadre of

competent men from whom junior officers might be chosen when such a need might next present itself.

As the little army returned to its constabulary duties, such educational schemes gained little enthusiasm from most officers, but as the end of the century approached, the growing naval and land forces of Germany began to be perceived as a threat and the possibility of another great mobilization rose in their collective consciousness. And as many reformers evaluated the need for the education of enlisted men and noncommissioned officers, the standard they applied was not that for the preparation of efficient soldiers and noncommissioned officers, but rather competent volunteer and regular army officers.

William Conant Church, editor of the Army and Navy Journal and former volunteer officer, called in 1866 for the turning of every military post into "a military academy for officers and men." Church also published pamphlets and manuals of particular interest to noncommissioned officers, Register of the Non-Commissioned Staff, and Guide for Non-Commissioned Officers, among them.³⁶ When Banning's House Bill No. 2264 proposed that all appointments to regular army commissions be limited to Military Academy graduates and first sergeants, Church lauded the bill as "the first attempt in the history of our regular army to adapt it to the democratic nature of the government by opening its

prizes to the people at large."³⁷

Representative Robert C. Schenck was Chairman of the Military Affairs Committee when Garfield proposed the education of enlisted men of the Regular Army in 1866. Twenty-two years senior to Garfield, Schenck was also from Ohio, a committed Republican and a former major general of volunteers during the war. In thorough approval of Garfield's military education bill, he informed the House that in future he would propose "an act to establish a system of education in the regular army...and provide that all promotions therein shall begin from the rank and file."³⁸

When General Sherman founded the School of Application for Infantry and Cavalry at Fort Leavenworth, Kansas, in 1881, Quartermaster General Holabird promptly suggested the school be given the added task of preparing specialists such as company clerks, riding-masters, drill-masters, noncommissioned officers, and farriers for the regiments of infantry and cavalry. More importantly, he saw the schools as the place at which young and promising noncommissioned officers should be prepared for positions as first sergeants and regimental staff noncommissioned officers.³⁹ However, Holabird's strong advocacy for the education of noncommissioned officers in the 1880s envisioned the whole system he proposed as being "steps to promotion having reference mainly to the system of

advancing non-commissioned officers to commissions."⁴⁰

Another officer who wished to educate noncommissioned officers and soldiers in professional subjects was Colonel August V. Kautz, 8th Infantry Regiment. Born in Baden in 1828, his immigrant family settled in Ohio where, at the outbreak of the Mexican War, he enlisted as a private in the First Ohio Volunteer Infantry Regiment. Receiving an appointment to West Point, he was commissioned in regular service in 1852. During the Civil War, he authored two useful manuals for noncommissioned officers: The Company Clerk, in 1863, and Customs of Service for Non-Commissioned Officers and Soldiers, in 1864. For his wartime service with the Ohio Volunteers and in regular service, Kautz was brevetted major general.⁴¹

As an inducement to recruit good soldiers, Kautz suggested in 1889 that army posts be turned into military schools.

There is in every part of the country a certain percentage of the youth of the land...that see nothing before them but hard work, humble pay, and an uneventful life, limited by their surroundings, who believe that if the chance was given them they could do better. They believe that if they had an education they would have some chance of rising in the world. It is from this material that we might hope to get a class that would not only make good soldiers, but who would, after five years of such training as could be given them, be suitable to furnish officers for any quota of volunteers that might be called for.⁴²

As president of the board of visitors to the Military

Academy at West Point in 1889, General Lew Wallace added an essay to the board's report in which he proposed to make all enlisted men possible cadets, and to extend West Point education and discipline throughout the army. To that end he made the egalitarian suggestion that "every fixed post in the country might be converted into a military academy," the company officers being respective instructors of their men. After four years of such schooling, he suggested, several hundred enlisted men might be selected on merit and transferred to the Military Academy to undergo final instruction. "In a marvelously short period," he predicted, "there would be officers ready made for a million men." Meanwhile the enlisted men sent to the Academy would absorb all the commissions for the vacant second lieutenancies, these being issued to them at the end of the fifth year according to their standing and general proficiency.⁴³

In 1890, Major Joseph P. Sanger, Inspector General for the Department of the Missouri, while lamenting the inadequate facilities, teachers and interest of post commanders for the post schools, on the one hand, pointed out the need for a common school education of all noncommissioned officer candidates for commissions, on the other.⁴⁴

Another critic of the post schools, Lieutenant John L. Sehon, 20th Infantry Regiment, reserved special criticism

for the newly established company noncommissioned officers' schools in 1890. He found them inadequate for lack of uniformity, while holding the curriculum to be restricted to such mundane subjects as the drill regulations, guard manual, and firing regulations. "A proper school," for noncommissioned officers, in his estimation, "would be one in which correct and practical instruction would be given in all the details of the duties which directly concern a company, and which a volunteer officer must know."⁴⁵

When examination for commission was opened to all enlisted men of at least two years' service in 1892, Major George W. Baird, army paymaster, held it to be ineffectual, as any good soldier would naturally achieve the rank of noncommissioned officer within two years' time.⁴⁶ He made the radical suggestion that all appointments to cadetships at the Military Academy at West Point be restricted to noncommissioned officers of at least two years' service.⁴⁷ For this to be truly effective the standard for the promotion of noncommissioned officers would have to be raised considerably, along with a concomitant increase in their pay and privileges. Baird was obviously not a graduate of the Military Academy. A Connecticut native who had entered Yale in 1859 only to have his education cut short by the war, Baird was a graduate of Hopkin's Grammar School in New Haven. He was also a 'ranker,' having served two years as a private in the Connecticut

volunteers before being commissioned as a colonel of a black volunteer infantry regiment. After the war he was awarded a regular army commission, and in the spirit of the times, Yale granted diplomas to Baird and his classmates who had left college to preserve the Union.⁴⁸

The noncommissioned officers' schools were a disappointment to those who promoted the need for a ready pool of professionally trained volunteer officer candidates. In 1892 the rhetorical question was raised by Lieutenant Sehon: "Is there any school, or even any organized manner in which our non-commissioned officers, as a class, are receiving the military education to qualify them to fill the positions that may be given them [as commissioned officers in any future conflict]? With the exception of the Artillery School at Fort Monroe, I am, not aware of such a place."⁴⁹

As the army began to feel the benefit of higher standards of recruitment as a consequence of nativist legislation and economic depression, the finer quality of recruit gave Major Sanger, then Inspector General for the South Atlantic District, cause to propose in 1897 that the post schools "be given the character of military schools, intended more for the professional advancement of the enlisted men than their education in the common English branches." Noting that the only schools established by regulation to teach military subjects were the company

schools for noncommissioned officers, he suggested "that some provision should be made for those who, while they have the intellectual and educational attainments for appointment [to a commission] are lacking in military instruction and experience." Furthermore, he desired that such training be given by officers, as "those who need detailed instruction most, [private soldiers], receive the least under the regulations at the hands of officers."⁵⁰

In all of these schemes, the education of both private soldiers and noncommissioned officers was overlooked as professional soldiers. The point of all such suggested reforms was to produce volunteer officers against the possibility of mobilization of state volunteers, and regular army officers promoted from the ranks of private soldiers as provided for by the act of 1892.

4. Oversight

General orders governing both the post schools for enlisted men and the 'captains' schools' for noncommissioned officers and selected privates continued to be issued by the War Department until the Great War. Education in the post school was no longer at the elemental level of but two decades earlier. Most courses of study presumed literacy on the part of the soldier

students and aimed at the production of more intelligent and efficient soldiers and noncommissioned officers.

The purpose of the post schools had become less confused in the minds of most officers, as well. In the past, the schools had been all things to all reformers. For one group, it was a 'school of the nation' in which recruits of humble origin, both native and immigrant, would be prepared as citizens. For others the schools were tools for moral suasion to be used to the same ends as reading rooms, libraries, chapels and canteens. It would be in their most utilitarian function, that of the preparation of soldiers for promotion to noncommissioned officer and for the instruction of noncommissioned officers in their professional duties, that the schools would prevail after the turn of the century.

Lacking in this educational scheme of things was the logical culmination of the struggle of the reform movement for the education development of enlisted men: the professional preparation of career noncommissioned officers. In a short service army, long service noncommissioned officers became even more important. The complexity of equipment and weaponry demanded technically proficient noncommissioned officers as well. The decentralization of command on the battlefield, a result of the firepower of modern weapons and subsequent new tactics, demanded that more noncommissioned officers be qualified as

small unit leaders. Perhaps equally important, the very success of the reform movement in instilling the elements of professional paternalism in the officer corps, along with its psychology of positive motivation as a leadership tool, required noncommissioned officers skilled as 'middle managers' in order that this style of leadership function efficiently.

Wearing his dress uniform with gilded stripes and spiked helmet, a noncommissioned officer of the United States Army might look like his British counterpart, yet all comparison ended there. Respect for his position was not proffered by his subordinates; his pay was but a few dollars more than a private soldier; a private soldier on extra duty might earn more than the noncommissioned officer; and he had no accommodations nor place of resort distinct from those of the common soldiers. But what annoyed the best noncommissioned officers was lack of promotion on merit and the professional instruction that would allow them to improve themselves while in the service.

In 1893, a disheartened noncommissioned officer gave the following invidious description of the educationally credentialed, British noncommissioned officer:

During a trip to England some years ago, I made it a point to visit several of the large military centres. The British sergeant struck me as resembling, in one respect, the Roman centurion, who, according to St. Matthew, remarked with

some degree of pride, "I say to this man Go, and he goeth, and to another, Come, and he cometh." The authority of the British sergeant is unquestioned; his word is law. The disciplinary gulf between him and his inferiors is as marked as that between the officer and the non-commissioned officer in our service. Except in line of duty...he associates only with men of his own military standing. He messes comfortably in the "Sergeant's mess," for recreation he has the non-commissioned officers' club room in the canteen, and he sleeps in a private room of his own. Furthermore, he attains his position, through successive grades, by a searching examination established by regulations. The certificate of this ordeal attests his thorough knowledge of drill and the three R's, and stamps him as superior to the ordinary rank and file.⁵¹

If the author of these words was not typical of the noncommissioned officers of the United States Army, he certainly epitomized those characteristics that reformers wished to see in the noncommissioned officers of that army which they were struggling to reform. An Australian immigrant from Melbourne, Victoria, R. Monckton-Dene enlisted in the army at St. Louis on December 22, 1888, stating his occupation as being that of sailor. At 65 inches in height, he was an inch and a half shorter than the average recruit, but at twenty-three, he was of the preferred age. His hyphenated surname was not recorded on the enlistment register, however, and he was enlisted as 'Private Monckton Dene.' Private Dene was assigned to Company 'B' of the 2d Artillery. Over the five years of his first enlistment he served at numerous posts, seeing a

great deal of his adoptive country: Fort McPherson, Georgia; Fort Hamilton, New York Harbor; Fort Riley, Kansas; the target camp at Fort Thomas, Kentucky; Fort Sheridan, Illinois; and Fort D. A. Russell, Wyoming, all artillery stations, excepting the last.⁵²

It was at Fort Russell that his enlistment contract expired, and he received his discharge with a character rating of "Very Goode" [sic], the second highest rating awarded discharged soldiers. The next day, December 22, 1893, he reenlisted in the Hospital Corps in the grade of Acting Hospital Steward.⁵³ The hospital steward was a member of the post noncommissioned staff, first authorized in 1856. Since 1872, their pay had exceeded that of line noncommissioned officers of the same grade. Performing everything from minor surgery to pulling teeth, the stewards were some of the most literate and intelligent soldiers in the army.⁵⁴ The grade of acting hospital steward was fairly new, however, having been introduced in 1887 when Congress authorized the new Hospital Corps. A general order specified that before a hospital steward could be appointed, the man must have served at least a year as an acting hospital steward. A new chevron using the traditional stripes of the line noncommissioned officer, but with a maltese cross added, was introduced to replace the traditional single band worn previously by the hospital stewards.⁵⁵

The Hospital Corps chose its personnel from volunteers of at least a years' service with the line of the army. Those selected were sent to either Fort Riley or Fort Russell for four months' training before assignment to a post. Only those who showed the greatest promise, such as Monckton-Dene, were given the additional training in materia medica, pharmacy, minor surgery, and the army regulations, necessary to prepare them for the position of hospital steward.⁵⁶

A highly literate noncommissioned officer, Dene authored three article which appeared in The United Service in 1893. In the first, a two-part fictional story, Monckton-Dene used his innocuous tale as a vehicle to air the injustices experienced by all noncommissioned officers of the army. Extra duty pay was particularly grating to them; a "raw recruit, with perhaps no more than three months' service," he wrote, "is given some extra-duty position in one of the staff departments, and is thereby enabled to draw more pay than the regimental sergeant-major...."⁵⁷

But the frustration of this well-educated noncommissioned officer was particularly acute when it came to the unprofessional nature of promotion in the army. The noncommissioned officer's experience might be the product of long service but promotion on merit was very subjective in nature for lack of any established standards. The army

reform movement of the late nineteenth century, contemporary with the civil service movement, brought a system of testing for selection of some commissioned officers but with few exceptions, did not apply to noncommissioned officers. This seemed inconsistent to Monckton-Dene, for...

as no examination is required to determine a soldier's fitness for promotion, that promotion cannot be regarded as a recognition of qualifications superior to those of the ordinary rank and file. It would seem rather to depend upon the mere negative recommendation of having done nothing 'to the prejudice of good order and military discipline' during the term of service as a private, or upon the whim or caprice of the battery commander.⁵⁸

Within four years, the Hospital Corps would institute just such a competitive examination for promotion to the grades of stewards and acting steward. By 1897 there would be 98 stewards and 99 acting stewards to cover the one hundred, or so, posts throughout the army.⁵⁹ But for the line of the army, promotion to the grade of noncommissioned officer would remain as subjective as ever.

In 1905, Captain Steward, whose text for noncommissioned officers was already two years' in use, hailed the arrival of a new era to his brother officers in a professional journal. "Succinctly," he wrote, "the atmosphere of the army today is one of clean lives, honorable dealing, an

enthusiastic devotion to country, an atmosphere enforced by a system of rigid discipline whose objective is the correction and encouragement, rather than the punishment, of the individual."⁶⁰ Yet lost to this model was the essential element, the noncommissioned officers. Lost were noncommissioned officers to the fragmented educational beliefs of the reformers as to the primary purpose to education for enlisted men, and lost to the fragmented system of education for enlisted men established by the War Department...a post level academic school system and a company level professional school system. For too many of the reformers, the purpose of both academic and professional studies for enlisted men, for instance, was not to prepare efficient noncommissioned officers, but rather to prepare men who would qualify for commissions in the volunteer regiments in any future wars.

Although the recruitment of better educated men would lead in the long run to a better quality noncommissioned officer corps, the immediate effect was unsettling. Noncommissioned officers became "not so distinct a class," in the eyes of the new recruits who tended to treat them with even less respect than noncommissioned officers has experienced in the past. An increase in dignity for noncommissioned officers would be contingent upon greater professional capacity argued the reformers, therefore, increased educational qualifications needed to be attached

to each promotion. An editorial in The United Service magazine identified the real problem in 1905 in noting that "the true explanation" for this unhappy situation was "to be found in the fact that in all schemes for improving the soldier's lot the non-commissioned officer has been overlooked - as a non-commissioned officer."⁶¹

Noncommissioned officer education began in the post schools and survived the post schools. Unlike the British army, however, the reformers did not start out with the expectation of the education of noncommissioned officers, but rather, that of the common soldiers. Indeed, the post schools were seen as being "supplemented" by the noncommissioned officers' schools, rather than the other way round.⁶² It was a measure of the traditional disinterest in the noncommissioned officer corps of the United States Army that noncommissioned officers were overlooked in the establishment of an educational system in the army. It is a reflection of their importance to that army that they were to become the reason for the continuance of that educational system once the idealism and theories washed away.

VI

CONTINENTAL INFLUENCES

The lead taken by the nations of Europe in the education of both civilians and soldiers was observed by Americans with interest in the last half of the nineteenth century. One obvious product of European civilian school systems was literate soldiers.

Regular army officers were quite familiar with the educational systems used in the armies of France and Germany, as were many enlisted men, some of whom were immigrants from those continental powers. Between the War of 1812 and the Civil War, more than one hundred officers made visits to Europe in either an official or unofficial capacity, seventy of whom would eventually see war service during the Rebellion.¹ While the prejudice of these officers was decidedly in favor of the French, they uniformly ignored such republican aspects of the French army as the commissioning of noncommissioned officers and conscription.

1. French Noncommissioned Education Before Sedan

The modern army of France dates from the Revolution of 1789. Some reforms had been attempted before that time, however; in 1764, during the ministry of Choiseul (1761-1770), literacy was required of noncommissioned officers, and a council of war called by Louis XVI in 1787 required each regiment to establish a school for candidates to the noncommissioned grades which would teach the men to read, write, and count.² They tended to be urban dwellers, as men from towns were more likely to have some education. Both La Fayette and Saint-Cyr held the French noncommissioned officers to be the finest in Europe. However, due to the commissioning of many of these men in the Revolutionary army and the introduction of conscription, the quality of the noncommissioned officer corps would suffer greatly by the turn of the century, according to Colbert.³

Long service and merit appear to have been general requirements for promotion in the French army prior to the Revolution. Fewer than three percent of the noncommissioned officers had less than four years of service. The training of an expert artilleryman required an eight-year enlistment.⁴ The seven regiments that composed the artillery corps provided technical

instruction, both theoretical and practical, for noncommissioned officers and for common soldiers desirous of promotion.⁵

By the revolutionary government's Decree of February 15, 1794, promotion to sergeant became contingent upon attainment of basic literacy. At least 15 percent of the infantry noncommissioned officers could neither read nor write. As the basis of the new army discipline was an education in civics for the conscripted soldiers, literacy was a necessity, for the soldiers were encouraged to participate in the political life of the Republic by frequenting patriotic societies, and by corresponding with these societies in the capital and in their home villages.⁶

Under Napoleon, however, the French would establish an absolute system of education, while Prussia was laying the foundations of a state educational system. In 1802, the former declassé artillery officer established the School of Application for Artillery and Engineers at Metz, and in 1804, he reorganized the Ecole Polytechnique along military lines. By the law of 1806 and a supplementary decree two years later, the State assumed control of all education and gave it a regimental organization. The product of this system was soldiers.⁷

Such events were counterproductive for noncommissioned officers. They needed education themselves, but more importantly, for their children. If the Revolution had

given little more to popular education then, in the estimation of M. Guizot, "Un deluge de mots, rien de plus," Napoleon did little more. Moreover, conscription had the pernicious effect of exhausting the lower classes, lessening their perception of the utility of primary education.⁸ For the soldiers, schools were established in most regiments of infantry and cavalry. Inspections of 1801 found the majority of these schools to be good, while only six infantry and seven cavalry regiments were found insufficient.⁹

The Bourbon Restoration (1815-1830) brought a renewed interest in primary education. As a result of the resumption of travel to England by the French and the military occupation of their country, a popularity was gained by the new teaching methods at work in England. A spate of French societies grew up to espouse the English methods of mutual education, in particular, Lancaster's monitorial system and Bell's mutual tuition.¹⁰ Indeed, the popularity of the so-called mutual education movement was a reflection of the decentralization of education that followed the establishment of the new government in 1815.¹¹ Senior officers belonging to one such group, the 'Société pour l'amélioration de l'instruction élémentaire,' began to establish regimental schools as early as 1816. More than half of the annual number of recruits were illiterate. Marshal Gouvion-Saint-Cyr, who became Minister of War in

September of 1817, sought to furnish all units with a school.¹²

Saint-Cyr did not stop there. His object in the law of March 10, 1818, was to control entrance into the officer corps by examination, one-third of the commissions going to candidates from the noncommissioned officer corps, over twenty years of age and with at least two years of service.¹³ Their education would need to keep apace of his expectations. On October 21, he ordered all division and guard corps to send to Paris an officer and a noncommissioned officer to attend a teacher-training course in mutual teaching methods, so that they might use those techniques upon return to their units.¹⁴

In less than three years, nearly 100,000 men had received elementary instruction in the mutual schools of the army. By 1821 there were 175 regimental schools in operation using mutual methods.¹⁵ This progress was even more impressive considering the conservative reaction to such decentralized education that took hold in the last decade of Bourbon rule. Noncommissioned officers of cavalry were to benefit by the establishment of the Cavalry School at Saumur in 1826. Chosen annually from among the most efficient noncommissioned officers of each regiment of cavalry, artillery and the trains, the students received instruction in mounted regulations, tactics, equitation, hippology, administration and accounting.¹⁶

Several laws promulgated in the early years of the July Monarchy (1830-1848) affected noncommissioned officers. The provision of elementary education at the regimental level was given the force of law by Article 47 of the Parliamentary Act of March 21, 1832. It was the wish of the lawmakers not only to return educated conscripts to civil society, but also that the schools provide a nursery for potential noncommissioned officers. While the act sped the development of the regimental schools, the introduction of compulsion in attendance was not strictly enforced.¹⁷

The noncommissioned officer corps also benefitted by the strides in the general spread of primary education during the July Monarchy. Guizot's law of 1833 made an attempt to bring the Enlightenment to the masses through a basic provision which obliged every commune to maintain a public school, although education was neither compulsory nor free. The knowledge that conscription would eventually place their sons into an army where no one could hope for promotion to corporal or sergeant without basic literacy provided an incentive for many parents in the rural departments to school their sons.¹⁸

The combination of civilian primary education and the regimental schools helped spread literacy in the army in general and in the noncommissioned officers corps in particular. In 1832, 53 percent of conscripts were

illiterate. By 1848, illiteracy had dropped to 40 percent.¹⁹ An army regulation of December 28, 1835 provided for the establishment in each corps of one 'first degree' school for the teaching of reading, writing and arithmetic, and a 'second degree' school for the further education of noncommissioned officers in grammar and arithmetic, among other subjects.²⁰

A long-time admirer of the Prussian army as a 'great school,' Napoleon III encouraged professional education in the army. Schools for officers and noncommissioned officers were established in each artillery and engineer regiment. Equipped with chemical laboratories, libraries, maps and plans, machines, instruments, and models, noncommissioned officers of artillery received both theoretical and practical instruction in their duties. Those of the engineers attended classes in geometry, drawing, construction, geography and military history. Sergeants major were required to do advanced study in geometry, trigonometry, and fortification.²¹

During the Second Empire (1852-1871), a military career, at any rank, held a limited social appeal. Conscripts were allowed to pay the government a fixed sum of money for a substitute, thus excusing the middle classes from accepting the principle of universal liability to service. The government had the selection of substitutes in its own hands and usually chose men who had

already served one term of seven years. The majority of noncommissioned officers tended to be from among the ranks of those substitutes. Generally of an inferior educational level than conscripts, the replacements often had to attend basic courses at the regimental schools.²² As secondary education spread, the army started to benefit by the enlistment of graduates who could not gain admission to St. Cyr. For many others, disappointment in their chosen careers forced them to turn to the army as the best alternative chance for mobility or a temporary occupation. After enlistment, they quickly acquired the noncommissioned officer's 'galon.'²³

Educated in the classical curriculum, these secondary school graduates were of little benefit to industrial society. Victor Duruy, Minister of Education from 1863 until 1869, argued that Germany and Switzerland were fifty years ahead of France in technical education, and insisted that France needed to train competent foremen. His argument received little more enthusiasm from the Emperor than did his demand for compulsory education along the lines of Prussian primary education.²⁴

It was the Austrian defeat by Prussia at the battle of Sadowa in 1866 that moved the reformers to press all the harder. For those who favored the Prussian system of mass education, it became common to paraphrase Ernest Renan in saying that "the Prussian schoolmaster won the battle of

Sadowa."²⁵

In 1868, Duruy proposed to Marshal Adolphe Niel, Minister of War, a reorganization of the regimental schools, with the aid of the inspectors of primary schools, for the instruction of the career noncommissioned officers and the common soldiers both. It would have an added advantage, he concluded, as such men would return to their villages used to discipline, and prepared to play an active role in the Niel's National Mobile Guard.²⁶

Such educational reforms were as little as they were late. When war with Prussia began in 1870, the weaknesses of the educational systems of both the army and the nation it served became apparent. As most company grade officers in the army were chosen from the noncommissioned officer corps, and elected by the common soldiers from the ranks of the old career noncommissioned officers in the National Guard, the educational level of the average officer was little higher than that of the population in general and the noncommissioned officer corps in particular. The Germans would express astonishment at the illiteracy of some captured French officers.²⁷ Lysee-educated young men, called to the colors in the face of the Prussian advance, found themselves hastily promoted to the grade of noncommissioned officer as the ranks became depleted. However strong their patriotic zeal, such affective sentiments could not compensate for their lack of

professional military education and experience.²⁸

After the humiliating defeat at the hands of Prussia, many of the French began to look for some flaw in the national spirit. Journalists once again paraphrased the dicta first heard in 1866 after the battle of Sadowa. The Prussian schoolmaster was seen as the architect of another victory, this one at Sedan.²⁹ The call for wide-spread primary and secondary education would soon become a national theme.

2. American Disaffection With France

The triumph of Prussian arms over Denmark in 1864 and Austria-Hungary in 1866 earned that nation favorable attention from professional soldiers and civilians alike. The prewar preference for the French had reversed itself by 1867 with the disastrous end to Louis Napoleon's adventure in Mexico. President Grant held Napoleon in "the utmost contempt," denouncing him as a "usurper and a charlatan."³⁰

The need for literate soldiers was made manifest by the experience of both regular and volunteer officers during the Civil War, and was subsequently taken up as a theme by civilian educationists in their struggle for compulsory education policies. Many educationists, both men and women, had themselves seen service during the Civil

War as either combatants or noncombatants, and these wartime experiences colored their postwar educational viewpoints. Among such veterans, there was, as one historian described it, an admiration for science and professionalism."³¹ And as Germany appeared to be the repository of everything scientific and professional, the desire of reform-minded educationists to see a system of compulsory education instituted in the United States was most understandably grounded in their admiration for all that was German.

The casual relationship between Prussian state-sponsored, compulsory education and high literacy rates for Prussian army recruits became a common object lesson used by civilian reformers. "The Prussian system of military education stands in close connection with the general education of the country," noted Henry Barnard, a civilian educationist second only to Mann.³² Louis Napoleon was disparaged by educators such as Victor M. Rice, New York State Superintendent for Education in 1867, for rejecting Duruy's recommendation advocating compulsory education in France. It was becoming obvious that compulsory military service and compulsory education were not only similar constitutionally, but moreover, the latter was essential to the success of the former. To Rice, the objections of the French to compulsory education appeared 'ludicrous' given their traditional acceptance of military

conscription and "the omnipresence of the police without a murmur of dissatisfaction."

The laws that drag a man into the army, or force his children into the school, may be equally arbitrary and equally a violation of personal liberty, but, if there is any choice between being educated or being shot, the preference would be given to education. The discipline of the school and the drill of the army are both necessary to the nation, promoting the national strength; and the recent experience of the United States [in the Civil War] and Prussia [in the war with Denmark and Austria-Hungary] proves that the discipline of the school will add to the efficiency of the soldier.³³

When the Prussian Army swept into France in 1870, such sentiments seemed justified. Edwin Lawrence Godkin, the reform-minded editor of The Nation, hailed the Prussian army as the hope of civilization.

If any power is to have more weight in the family of European nations than another, we are all interested in its being the power whose armies contain most readers and writers, and which when it goes to war had to call the most intelligent citizens from their homes. It had been a favorite saying of the Bonapartes that "bayonets don't think." Bayonets are, however, beginning to think; and the more they think the less chance will there be in the world for the class of adventurers of which the Bonapartes are the most illustrious members. The Prussian army is fighting for a free press, a free parliament, popular education...supremacy of reason over brute force, [and] of the citizen over the soldier.³⁴

3. Prussian Noncommissioned Education

With the death of Frederick the Great in 1786, there was a general amelioration of discipline within the regiments. There followed an effort on the part of the government to educate the children of soldiers and the soldiers themselves. Over the early years of the reign of Frederick III (1798-1840), schools were established at military garrisons. By the end of the century, these garrison schools were becoming sufficiently institutionalized to require a reader which was duly published in 1798.³⁵ The impetus behind some of the garrison school patrons went beyond a general benevolence; they saw the schools as a chance to guide the soldier into selfless service toward the state. This notion would blossom in the next century.

Tempering this paternalistic benevolence was the Hohenzollern apprehension that education would give the common people (das volk) pretensions and cause them to become discontent. "Since the chief purpose of the 'garrison' school is to train future soldiers," warned the king in a circular to overambitious teachers, "it is only necessary to teach them what is necessary for the common soldier, under officer, and sergeant to know in order to fill their places as useful and contented men."³⁶

By the turn of the century, the role of the Prussian noncommissioned officer had broadened from the traditional disciplinarian to that of combat leader as a result of the change of tactics brought about by the adoption of the strategy of kleiner Krieg, a departure from the rigid frontal attacks of the age. This, in turn, led to the need to educate the noncommissioned officer in both military and primary school subjects.

In 1807, days after complete defeat at the hands of the French, King Frederick William III appointed a Military Reorganization Commission with instructions to investigate the recent campaign which resulted in the capitulation at Tilsit on July 9th, to cashier and punish those officers whose conduct had been improper, and to suggest changes in the organization of the army, in particular, its education and training.

As a result of the commission's work, instruction in reading and writing was required for noncommissioned officers and soldiers in 1811, instruction being conducted during the winter months in the regimental schools by qualified officers and noncommissioned officers. They were also given special tactical instruction.³⁷ But as in the case of France years later, when universal male conscription became law in Prussia, in 1814, the 'educated classes' were exempted from long service and the noncommissioned officer corps was denied their membership.

These young men needed only to outfit and arm themselves and serve as one-year volunteers with the new Jaeger battalions. While the initial effect was to greatly stimulate all classes to gain more education, it eventually led to bribery and corruption on the part of unscrupulous noncommissioned officers in their dealings with these well-to-do 'one-year-volunteers.' As criticism of this exemption mounted over the years, eligibility became tied to completion of increasingly higher grades of the Gymnasia.³⁸

General Albrecht von Roon, Minister of War from 1859, planned for the maintenance of a reliable regular establishment by calling for a well-trained and greatly increased noncommissioned cadre. He suggested that new military schools be established for that purpose.³⁹ By the Franco-Prussian War, the noncommissioned officer corps of the Prussian army was the most professionally prepared of any army.⁴⁰

Yet only a fraction of the total number of noncommissioned officers were provided by these schools. The vast majority were taken from the ranks, usually from men who reenlisted (Kapitulanten). Due to the free and compulsory nature of civilian education, these men were in all cases literate. They continued their studies in the regimental schools in classes from 20 to 25 in size. Instruction in military subjects was also given in order to

fit them for positions as senior noncommissioned officers, and, after 1885, as civil servants upon discharge after twelve years' service. Upon successful completion of this course of study in German, history, arithmetic, mensuration, geography, map reading, and military correspondence, each noncommissioned officer was presented with a certificate of proficiency.⁴¹

4. The Franco-Prussian War

The complaisant attitude toward reform which characterized the postwar United States Army was unsettled by the bold Prussian successes against France in 1870. From the President on down, American sympathies were proffered the Prussians. To E. B. Washburne, Envoy Extraordinary and Minister Plenipotentiary of the United States to France, was given the official mission of protecting German subjects until the resumption of diplomatic relations between the two warring nations.⁴² One after the other, officers and civilians alike touted the superiority of Prussia and suggested emulation of that nation's policies.

Lieutenant General Philip Sheridan, commander of the Department of the Missouri, was one of the first to visit the battlefields, probably in the hope that his report

might awaken the Congress to the dangers of military reductions. Refused by the French for security reasons, the Prussians welcomed him warmly.⁴³ Sheridan confided to President Grant before his departure, however, that he would accompany the Germans for the reason that "more could be seen with the successful side."⁴⁴

William T. Sherman, the Commanding General, toured Europe from November 1871 until the following September, While he was probably attempting to escape both the frustrations of his office and his running feud with Secretary of War Belknap, Sherman used the occasion to drive home the superior nature of the Prussian system at the expense of that of the United States.⁴⁵

He found the Prussian people to be more intelligent and industrious than the French," and their army as "very much superior in bearing, appearance, dress, and organization."⁴⁶ In declaring the German method of recruitment as being "simply perfect," Sherman disparaged the wartime policy of the United States of raising new regiments to replace those reduced by active service as a waste of experienced men. He recommended the European method of filling the original regiments from the bottom with new recruits, and the officer vacancies "from the best noncommissioned officers and men."⁴⁷ That the Prussians promoted from the ranks only when driven by abject necessity, while the French commissioned

noncommissioned officers in peace time as well as war, was overlooked by the commanding general.

Colonel William Babcock Hazen

In 1870, the War Department sent the commanding officer of the 6th Infantry Regiment, Colonel William Babcock Hazen, to tour both sides of the conflict. Hazen's report was published as a popular book, entitled The School and the Army in Germany and France with a Diary of Siege Life at Versailles. In this book, Hazen praised three peculiarly German features; universal military service, universal suffrage, and universal compulsory education. Of these, the army of Germany benefited most from the recruitment of an educated body of soldiers, in Hazen's opinion. He detailed the civilian elementary and secondary educational institutions of the two nations in order to establish the background of popular education brought to each army by recruits. He also lauded the professional education system within the German army for the instruction of officers and noncommissioned officers. "One great lesson of this war," he concluded, "must be the power of popular education as an element of strength and virtue, and a disapproval of the old idea that the greatest brute makes the best soldier."⁴⁸

Hazen expressed a particular interest in the German noncommissioned officer corps. He tried to inform his

readers that their education and respectability were a mainstay of the German army. In characteristic overstatement, Hazen tried to drive home his point for the need of a professionalized noncommissioned officer corps by claiming that he "had commanded regiments of volunteers [in the Civil War] with not a commissioned officer in them equal to some of the non-commissioned officers in every German regiment," and that he had "seen many sergeants...who in our service would have been given colonel's commissions."⁴⁹ In denigrating the quality of volunteer officers, he voiced a stock conversation piece of regular army officers who served in the war. Hazen stopped short of recommending the commissioning of meritorious noncommissioned officers, however, a logical collateral to his observation. On the contrary, he praised the Prussian practice of officering its army "on aristocratic principles," and condemned the French for the "low moral standard...applied in her selection of officers."⁵⁰

Hazen was among the first of many critics who sought to find the Prussian advantage in social and political institutions, to the exclusion of the reality of the war; unlike France, Prussia had kept abreast of the military and industrial revolution that has transpired over the preceding fifty years. It was the Prussian edge in modern technology that led to the French collapse at Sedan. Railways provided the mobility necessary to concentrate

large forces along with the ability to provide for their resupply, electric telegraph allowed for the rapid communications necessary to the implementation of the general staff's strategy, while breech-loading, rifled weapons brought accurate, long range fire on the French.⁵¹ The magnificent system of Prussian civilian and military education existed to serve the educational imperatives caused by the exponential growth of technology, rather than the other way round.

Yet for Hazen it was the French system of popular education, inferior to that of Germany, which put the nation's army at the disadvantages in the war. Civilians were quick to take his point, and his position was received with general approbation at home. The book's reviewer in The New York Times noted the following:

To the training of the common schools and academies succeeds that of the military establishments; and in the latter as in the former the grand object is to make the pupil intelligent, self-reliant, and yet docile. Strict and severe to the last degree, the training is never such as to break the spirit of the men, or degrade them to the level of living machines. The result is that obedience becomes not so much a soldierly instinct, or second nature, as an intelligent subjugation of the will of the inferior in rank to that of the superior; and the German armies are not more distinguished for the excellent intelligence than the excellent Morale of the rank and file.⁵²

The reviewer ended with a caveat concerning Hazen's criticism of the lack of professional education in the army

of France, and that nation's reliance on illiterate peasant conscripts. "General Hazen's volumn is full of warnings for ourselves. He shows that in most points we follow, in our military system, the example and the traditions of France, and that speedy and radical reforms are imperatively needed."⁵³ Perhaps this was also a lesson drawn at great expense by the French from the disastrous war.

Congressman Garfield, who had long held the Prussian system of education as a model to be emulated, "was very greatly pleased with the spirit and character" of the work, and congratulated his boyhood friend from Hiram, Ohio, and the Western Reserve Eclectic Institute, on the "splendid reputation" it had given him.⁵⁴

The New York Times hailed Hazen as "one of the best military critics in the country." The Nation paraphrased Hazen's excoriation of the French as being deficient in the "essential elements of civilization - education, intelligence and morality." The magazine reminded its readers of the modern and compulsory nature of Prussian education. "In France," The Nation noted, "school attendance is not compulsory; the peasantry, who number 25,000,000 of the nation, are grossly ignorant and stupid; and of the entire population...only-one third can read and write."⁵⁵

Hazen's influence would prove greater with civilians,

however, than with his brother officers. An "aggressive and disputatious" man, he had few friends in the army. Sherman and Sheridan reportedly had taken offense at some of Hazen's uncritical views of the Prussian military system. Both men had come away from their European tours convinced that although the Germans possessed the finest military establishment in the world, little of the Prussian model could be transferred to the United States. What the Prussians had created was adapted to their national values and organization. It would have been a mistake, in Sherman's opinion, to take such a scheme whole cloth and try to apply it to another country. And Lieutenant Colonel J. G. Foster, Corps of Engineers, cautioned Congress in 1872: "I feel a great hesitation in making suggestions as to changes in the organization and management of our Army. It is, so to speak, an American army, and of necessity, different in its organization from the English, French, or German."⁵⁶

5. Professionalization

A spate of articles in professional journals along with report by visiting officers were published following the war. The authors were in complete agreement that Prussia presented the paradigm of professionalization. The

interest began with the testimony of Major Thomas M. Vincent, Assistant Adjutant General, before the House Military Affairs Committee on April 17, 1872. Vincent reported on the European armies and submitted tabular statements comparing the educational systems of the various armies. Vincent suggested to General John Coburn, the committee chairman, five principles for the advancement of the efficiency of the army. The very first of these called for "[t]wo or more schools for the education of non-commissioned officers. The course of study and details of the establishment to be determined by a board of officers selected from the artillery, cavalry, and infantry."⁵⁷

In July of 1872, Williams C. Church's Army and Navy Journal condensed some of Hazen's major arguments for its readers, then in November, it reprinted an article from the Washington Chronicle, entitled the "Benefits of Prussian Military Training," in which was described how universal service in the German army functioned as the capstone to the civilian educational system. The civilian correspondent related how the Prussian recruit received instruction during "regular school hours...in reading, writing, arithmetic - in short, in all the branches of education which are generally taught in our grammar-schools, officers of various rank acting as teachers."

Thus, when a soldier at the end of his
three years' service returns to his home,
he presents himself often to the
astonishment of his friends as an entirely

different man, greatly improved physically and mentally, and thereby enabled to fill positions in society for which he would have entirely unfit without his military education....[T]he universal service in Prussia is looked upon by the people generally, not as a burden, but rather as an institution for a better education; a benefit to the nation; and the desirableness to be a soldier is very much heightened by the law that nobody is admitted to any public office unless [he has] the requisite credentials for his military career....⁵⁸

Henry Barnard reported on the conditions of the Prussian preparatory and Noncommissioned Officers' Schools in detail in 1872 in both his American Journal of Education and in a collection of his articles on military education published in book form. Despite the dated nature of his sources, most being from the 1850s, he offered an intelligent civilian audience a comprehensive view of the Prussian military educational system.

As to the education of noncommissioned officers, Barnard began with the preparatory schools (Unteroffizier-Schulen) located at Annaburg and Potsdam which offered a two year course of instruction to boys between the ages of fifteen and sixteen, often the orphaned sons of soldiers, for entrance directly into the Noncommissioned Officers' Schools upon enlistment. Staffed by officers, noncommissioned officers, and civilian teachers, the curriculum included German, arithmetic, geography, physics, writing and singing. The course in morals was "adapted to the particular views" of the Lutheran Church.⁵⁹

Similar to the Lower Technical Schools (Realschulen) which accepted students from the Volksschule and Mittelschule, were the noncommissioned officers' schools (Schulabtheilung) which Barnard reported as being very select in accepting the three-year volunteers between 17 to 19 years of age for instruction in reading, writing, arithmetic, German, system of accounts, history, geography, sketching, and singing. Although originally intended to prepare the orphaned sons of soldiers for entrance into the noncommissioned officers' schools of the army, applications from the young men of the country became so numerous that the original practice was abandoned. Barnard's report stressed that the candidates for admission to the schools were of "the middle rather than the lower classes."⁶⁰

Only the best graduates of the three-year course were promoted to the noncommissioned officer corps before being placed in small unit leadership positions in line companies. The other graduates would be promoted to lance corporal or private and could expect to be promoted as noncommissioned officers within one year of graduation. Those who were not deemed fit as leaders could expect positions as clerks, quartermasters, paymasters or storekeepers. Once promoted, noncommissioned officers would attend the Regimental Schools whose mission it was to "train up" the noncommissioned officers of each regiment. All graduates incurred a twelve-year service obligation

upon discharge. The three years spent at the noncommissioned officers' schools were credited against that obligation.⁶¹

In 1874, General McClellan used the pages of Harper's to commend to its civilian readers the officership, both commissioned and noncommissioned, of the Prussian military machine. "The German empire possesses the best organization and the best army in the world; claimed McClellan, "...so perfect in discipline and instruction, so well officered and handled throughout, from the renowned von Moltke down to the youngest corporal." Indeed, it was the presence of good and well-trained noncommissioned officers that allowed for the large German companies of 250 men each.⁶² It was small wonder that McClellan was impressed with the size of the German companies; a company of infantry in the United State Army contained no more than a quarter of that number.

In a second article for the magazine, McClellan devoted a section to the selection and instruction of noncommissioned officers in the German army. He described in detail for his readers the three-year courses of the noncommissioned officers' schools and the positions of responsibility in the army to which the graduates were assigned.⁶³ Many of these military occupations for noncommissioned officers, such as paymaster and laboratory sergeant, did not exist in the hidebound United States

Army.

First Lieutenant Adolphus Washington Greely, 5th Cavalry Regiment, translated two articles from the French for The United Service magazine in 1879-80. The subject matter of both articles was taken from the writings of French officers who had attempted to reform the French army and its corps of noncommissioned officers. Greely did not comment on their intentions, he simply translated their words.⁶⁴

While the first article called for the elevation of the social status of the noncommissioned officer, in the second, Greely translated a description of the system of education for noncommissioned officers in the Prussian army. The information was taken from a work entitled L'Armee Francaise en 1867 and credited to General Louis Jules Trochu. Trochu's intentions to severely criticize the defects in French army organization and to inform the French officers corps of the advanced state of the Prussian army earned himself a large measure of disfavor with the court of Louis Napoleon. In translating Trochu's words into English, Greely attempted to do as much for such officers as read their own professional journals in his own army.⁶⁵

French Army Educational Reforms

A spate of reforms followed the war, but each failed

to substantially improve the lot of the noncommissioned officer corps. In July of 1872, the National Assembly enacted a compulsory service law, the result of which might have been to bring into the army a higher caliber common soldier from which the ranks of the leadership might eventually benefit. It fell far short of this goal by making a compromise with bourgeois disaffection with the notion of universal military service. While volunteers, previously allowed to enlist even if illiterate, were now required to be able to read and write, a partial exemption was given holders of the certificat d'etudes and that badge of membership in the bourgeois, the bachelier. Allowed to engage for one year as voluntary recruits, then return to civilian society, subject to recall at any time during the term of their five-year obligation, their talents were lost to the noncommissioned officer corps.⁶⁶

That same year a commission established a school to train noncommissioned officers. The course of instruction for infantry was eighteen months long, while two years in length for the artillery, cavalry, and engineer arms. Between three and five hundred noncommissioned officers were graduated from the schools each year. After graduation they were sent to the regiments in the grade of corporal or sergeant, depending on their proficiency. Honor graduates were sent to the Military Academy to prepare for commissioned service. The education of

noncommissioned officers in the 'second degree' schools was stepped up as well.⁶⁷

An army regulation of July 31, 1879, established a 'field primary school' (école primaire de campagne) for illiterates, and a 'preparatory course' (cours préparatoire) for sergeants, corporals and privates who already had some primary education and who aspired to a commission on either the active or reserve list. But it was not until the Ferry Laws of 1881-82 that primary education became both free and compulsory for children ages six through thirteen. As a result of the Ferry reforms, the percentage of illiterate army conscripts declined from 14.4 percent in 1881 to 5.1 percent in 1897.⁶⁸

6. The Upton Commission

On the Recommendation of General Sherman, Colonel Emory Upton made a worldwide tour of military establishments from 1875 until 1877. He was accompanied by Captain Joseph Prentiss Sanger, Artillery, and Lieutenant Colonel James William Forsyth, Infantry, aide-de-camp to General Sheridan.

Upton visited the noncommissioned officers' schools of Italy and Germany. His report touted the advanced state of professional education given the noncommissioned officers

of these armies and "the theory, now universally adopted in Europe, that a good non-commissioned officer can no more be improvised than an officer."⁶⁹ Upton gave a detailed description of the preparatory schools and the noncommissioned officers' schools, institutions already well-known to the reading public through the descriptions of Hazen, McClellan and Barnard. The schools he found in each battalion for the general education of the soldiers in reading, writing, spelling and arithmetic, made the greatest impression on him. Among the seven features of European armies Upton found most worth imitating, the fifth on his list was the establishment of schools for enlisted me.⁷⁰

As McClellan and others had urged their peers to look seriously at the peacetime cadre system of the Europeans, so to did Upton. A major reason for the European emphasis on the training of noncommissioned officers was their essential role as peacetime cadres upon which rapid expansion during mobilization would depend. Upton stressed the excellence of the German system of recruiting and the importance of the reserve (Landwehr). The reformers would be frustrated on this issue; the militia system remained the basis of United State military preparedness until the Great War.

Although admiring the German army as the most professional in the world, Upton stopped short of becoming

a Germanophile. Pragmatic in this respect, he cautioned in a letter shortly after arriving at Fort Monroe in 1877, "We cannot Germanize, neither is it advisable, but we can apply the principles of common sense...."⁷¹ Yet Upton had a certain predisposition to the German system. He was, as one historian notes "...intense, humorless, single mindedly devoted to the military profession and to efficiency in it, a sober, even brooding, man sustained by an old-fashioned Protestant piety - in short, a man not unlike several of the German military reformers themselves."⁷²

The significant contributions of the civilian public schools to the army were no less obvious to Upton than they had been to Bernard and Hazen. "How completely the nation is given over to warlike preparation," wrote Upton from Berlin in 1876, "is shown by the boys, who wear military caps, and by both boys and girls, who carry their books to and from school in knapsacks."⁷³

Previous to his world tour, Upton's reputation had been based on his superb abilities as a tactician. He now turned to military policy in a futile attempt to influence his superiors to take seriously the cause of reform. "Yet his voice was as the voice of one crying in the wilderness," as Elihu Root would remark some forty-five years later.⁷⁴ From his death in 1881, a quarter of a century would pass before his manuscript would be seriously read by another generation of reformers.

Upton's influence continued to be felt, however, in the work of another commission member, that of Captain Joseph P. Sanger, an able staff officer and fellow artillery officer. Sanger became a steadfast enthusiast of the professional development they had observed in Europe. Sanger did not develop Upton's infatuation with the German model to the exclusion of all others, however. But he received as little encouragement as did Upton from the Adjutant General, who informed him that the meager appropriations of Congress would not allow the War Department to publish his report. After requesting and receiving authority to public extracts from his reports, Sanger produced one article for the Journal of the Military Service Institute and five more for the United Service, which appeared between 1880 until 1884.⁷⁵ These articles covered the professional aspects of the artillery arms of Germany, Great Britain and Italy, including a description of the provisions for the instruction of noncommissioned officers of Artillery in each country.

In Germany, Sanger had visited the artillery's Pyrotechnical School (Oberfeuerwerker-Schulen) at Berlin. There he observed the instruction of about two hundred artillery noncommissioned officers who were aspirants (asiranten) for the position of laboratory sergeant, with a view to their future advancement to the grades of artillery master artificer and store officer. About two hundred

students were in attendance at the school at the time of his visit. Sanger reported that the course of instruction was nineteen months in duration and divided into three sections: foundations (eight months); practical (four months); and exercises in drawing and gymnastics (seven months).⁷⁶

The Italian Army, reported Sanger, required all illiterates to attend special elementary schools. Only those soldiers in possession of an elementary education were allowed to attend the Corporals' Schools or the Sergeants' Schools. At the latter, the curriculum consisted of army regulations, grammar, mathematics, geography, and the use of maps. Higher schools in the artillery branch were also available to qualified noncommissioned officers.⁷⁷

Reports on German education of noncommissioned officers continued through the turn of the century, but the interest given them was far less enthusiastic than previously. Interest in foreign armies flagged as nativist passions expanded at home. Improvements in the German army's educational system for enlisted men were outlined in 1896 by Captain Joseph O'Connell, 1st Infantry Regiment, in the pages of The United Service. An Irish immigrant, O'Connell had served as an enlisted man in the Regular Army from 1865 until 1867 with the rank of private and artificer in the engineers. O'Connell described for

the magazine's readership the preparatory schools, along with the noncommissioned officers' schools for which these boys were being prepared.⁷⁸

Noncommissioned officers of the German Army received special attention in a "Report on the Organization of the German Army," by Major Theodore Schwan, Assistant Adjutant General. First submitted in 1893, it was not published until 1902. His report included the six preparatory schools for noncommissioned officers at Annaburg, Weilburg, Neu-Breisach, Julich, and Wohrlau, and Potsdam, and on the six noncommissioned officers' schools located at Potsdam, Julich, Bierbach, Weissenfels, Ettlingen, all in Prussia, and Marienwerderwaere in Saxony. He reported the total number of pupils in attendance at the noncommissioned officers' schools as being close to 4,000.⁷⁹

Unlike those optimistic reports filed by previous visitors concerning the efficiency of the German noncommissioned officers' schools, Schwan's report offered a caveat.

The importance of an efficient corps of noncommissioned officers is perhaps nowhere more keenly felt than in Germany. Only a comparatively small number is obtained from the noncommissioned officers' schools, and indeed it is sometimes found that the elites of these institutions, while almost always well equipped theoretically, sometimes lack the most essential of all requirements - moral stamina and aptitude for handling men.⁸⁰

Schwan took comfort from the fact that most German

noncommissioned officers were taken from the ranks, "the real choice devolving, as with us, upon company commanders, who realize that their own professional standing depends in a great measure upon the successful exercise of their discretion."⁸¹ Schwan thus reflected the desire of most officers that the selection of noncommissioned officers remain in their own hands. They had no desire to see a centralized and meritocratic selection process controlled by military academics.

What the reformers failed to accomplish through their admiration for the thoroughly professional German military machine would be accomplished through fear of the threat posed by that same force. By the 1890s, the artillery and engineer branches of the United States Army were modernizing under the pressure produced by fear of foreign invasion. By the end of the century, admiration for Germany had turned to distrust and paranoia among the higher echelons of the army, while their regard for the French increased. Interestingly, this renewed interest in the French was coincident with the French reneging on their century-long policy of commissioning noncommissioned officers.

In the end, the general education of enlisted soldiers was accomplished not by the army but by civilians. The spectacular growth of public schools and the introduction of compulsory education laws rendered the efforts of

military educationists moot. The degree and quality of civilian education possessed by each soldier, of course, limited the extent of any programs developed by the service schools for the professional education of soldiers and noncommissioned officers. In 1904, an English observer of American Soldierly in the Philippines noted that "taken personally, the American soldier is vastly the superior of the [soldier in European armies] in intelligence, and although often but self-educated, he is ever so much better educated than the average soldier of other countries."⁸²

Civilians still stood in admiration of the German educational system. While the enthusiasm of the school men had cooled by the end of the century, that of business men increased. "I am convinced," a banker informed the National Education Association in 1905, "that the explanation [for Germany's economic success] can be encompassed in a single word - the schoolmaster. He is the corner-stone of Germany's remarkable commercial and industrial success."⁸³ Thus, the German schoolmaster continued to be all things to all people.

VII

ARMY SERVICE SCHOOLS

The Civil War has been described as a 'bridge' between two societies, the traditional antebellum agrarian culture, both free and slave, and the modern post-war industrial era.¹ Indeed, the war was patently an impetus to modernization as witnessed, in the war's wake, by the sanitary commissions, civil service system, specialization in both the professions and industry, mass production, telegraph, railroads, bureaucracy, and even the application of the 'army system' to public education.²

The phenomenal expansion of middle management, the exponential growth of practical technology, especially as applied to the use of electric apparatus, and the attendant demand for technical specialists, were the distinguishing industrial features of the post-war decades. Such notions as scientific management, self-help, specialization, promotion on merit, and industrial discipline, permeated the culture of workers, clerks, foremen, supervisors, and managers.

How ironic, then, that the victorious human instruments of that struggle, the regiments both regular

and volunteer, remained not only 'traditional' in organization and operation, but maintained that aspect long after the war ended. Between the Civil War and the Spanish American War, the number of soldiers engaged in an identifiable occupational specialty increased only from about 5 to 9 percent.³ Paternalistic and static, the army seemed impervious to the 'modernization' of the contemporary civilian society it served.

Yet modernization was occurring. While most of the post-war frontier army attended to the mundane duties of garrison and field service, duties that had changed little in decades, the commissioned officers, noncommissioned officers, and men of the engineer and artillery branches, were on the cutting edge of modernization. In an army of more than one hundred posts, only two were the genuine centers of this progress: Willets Point (later known as Fort Totten), New York Harbor, and Fort Monroe, Old Point Comfort, Virginia. Willets Point was home to the Battalion of Engineers and both the Engineer School of Application and the Torpedo School (later known as the School of Submarine Defense), while Fort Monroe was the site of what was to become one of the foremost service schools in any army, the Artillery School, which later became the Coast Artillery School. A competitive relationship grew between these two establishments based on mission, technology, and history. Neither can be studied with satisfaction to the

exclusion of the other.

Of particular interest is the development of courses of instruction for noncommissioned officers, the group upon whom fell the duties as technicians, foremen and supervisors in the military establishment. The degree to which, and the speed at which, the Regular Army modernized can be gauged by the progress in the professionalization of the noncommissioned officer corps. Whereas the professional education of officers might often anticipate the acquisition of new technologies, the education of noncommissioned officers was a direct consequence of the implementation of new technology. Credit for their professional preparation may be placed primarily with the commandants and superintendents of the engineer and artillery schools at Forts Totten and Monroe, respectively.

1. The Early Service Schools

The first of the service schools was established in 1824 by Secretary of War John C. Calhoun at Fortress Monroe, Virginia. Known as the 'Artillery Corps for Instruction,' the school, under various names, would become the foremost service school in the army until the Great Depression budget cuts of 1933.⁴

Unlike any of the other service schools, the Engineer

School of Application at Willets Point was not established by the War Department; the school was the creation of the powerful and independent Corps of Engineers. The school, which was organized in 1866 by the Chief of Engineers and run by the commanding officer of the Battalion of Engineers, was envisioned as a facility where graduates of the Military Academy at West Point would be able to apply the theory learned at the Academy to the realities of army engineering.⁵ Before long the school developed into a center for research and development, especially in the apparatus of coast and harbor defense.

In 1868, the Signal School of Instruction was established at Fort Greble, D.C., only to be transferred to Fort Whipple (later Fort Myer), Virginia, two years later, the first of many moves for the school. Two competitive examinations needed to be passed by those "bright, [civilian-educated] young men of the country" who wished to enlist for training in the meteorological service of the Signal Corps. Instructed in meteorology and Morse telegraphy, the graduate observer-sergeants and their assistants manned the twenty-five weather stations that stretched from the Mississippi Valley to the Atlantic and Gulf coasts.⁶ When Congress authorized a permanent force for the Signal Corps in 1875, all recruits were required to pass a preliminary examination and all promotions and assignments became contingent upon successful completion of

instruction and examination at the Signal School. It was possible for an intelligent recruit to become a Sergeant within six months' time. In 1891 the school relocated to Fort Riley, Kansas, where electricity was added to the course of study for enlisted men. After the Spanish American War, the school was reestablished at Fort Myer, Virginia, where instruction in electronic signal apparatus increased significantly. After 1912, Signal instruction for enlisted men continued at Fort Wood, New York, and Fort Leavenworth, Kansas, with use of the radio and construction of lines being added to the course of studies.⁷

As for the infantry, cavalry and field artillery arms, the technological impetus to both modernization and schooling were far behind that of the heavy or coast artillery, engineers and signalmen. It was not until 1881 that a service school was organized for those branches. When General Sherman ordered that a school of practice for cavalry and infantry be established at Fort Leavenworth, Kansas, he was more concerned that the officer students study penmanship than their profession. Ambivalent toward the benefits of education, Sherman viewed the army as being an "Executive Machine" rather than an "Educational Establishment."⁸ While Sherman intended that the enlisted men of the model units receive instruction in tactics and the school of the soldier, company and battalion, it is unlikely that he gave any serious consideration for the

need to offer special instruction to noncommissioned officers. Sherman tended to see noncommissioned officers as senior members of an amorphous rank and file. Neither did Sherman see the general education given in the post schools as a priority for the army. In 1883 he declared that there was "no urgent call" for them.⁹

In order to avoid Congressional criticism of extravagance in the construction of the school, Sherman directed that the money for maintaining the school come from regularly allocated funding.¹⁰ It is ironic that he used the labor of the prisoners confined at the military prison at Fort Leavenworth to construct the school. The prison, built in 1875, was the achievement of the same reformers who promoted the schools. Cells and classrooms were two sides of the same reform coin.

In 1887, a school of instruction for drill and practice for cavalry and light infantry was established at Fort Riley, Kansas, later to become the School for Application for Cavalry and Field Artillery. The School for Noncommissioned Officers and Selected Privates held daily instruction, Saturdays and Sundays excepted, from January through the end of April. Instruction was by battery, each captain, assisted by his lieutenants, being obliged to instruct the noncommissioned officers of his battery. Regulations, the drill manual, hippology, horseshoeing, draft animals, construction of temporary

bridges and field works, reconnaissance, use of sights, construction of shell, shrapnel, and fuses, range finding, and practice in firing artillery were all covered in the seventy-nine hours allotted to instruction.¹¹

In 1903, a Training School for Farriers and Horseshoers was organized as a part of the school at Fort Riley. All but ten of the three hundred and thirty-nine men who attended the school the first year, attained certificates and were sent to the Philippines upon graduation. Classes averaged forty men and were only one month in length. Military and civilian veterinarians instructed farriers in care for simple ailments of horses, symptoms and medicines. Students used a manual prepared by the school. Although mostly practical, the course for horseshoers taught students the anatomy of the foot, its diseases and treatment.¹²

The cavalry captain who served as director of the school found the students sent him as being of indifferent character. Lack of physical examination prior to selection, venereal disease, lameness, drunkenness, absence without leave, and lack of education were, he claimed, common among these men. His report suggested that at least one troop commander considered enrollment in the school as an expedient for being rid of an otherwise worthless soldier.

In the present class of farriers there is one man who left school at the age of ten,

and is not even of average brightness. He informs me that his troop commander never questioned him about the detail to this school, and that he had no opportunity to report his lack of education and his disinclination to come here.¹³

This officer's tone of frustration belied a problem common to the cavalry and field or light artillery; although they attracted young men "because of the horse," they were the two most physically demanding branches of the army. According to General Howard, enlisted men were treated with more respect in the cavalry than in any of the other branches. Yet he could not recommend enlistment in even that branch, or in the arm he personally preferred, the infantry, to an educated man. Educated civilians were drawn to the positions for clerks with the General Service and Messengers, to the post noncommissioned staff, and to the artillery and engineers, particularly those units engaged in coast defense.¹⁴ The line of the army had to make do with recruits possessing an indifferent civilian education. Therefore, the service schools for field artillery, cavalry and infantry, were limited in their ability to offer professional instruction to noncommissioned officers and selected privates by the capacity of such students sent them, as much as the lack of enthusiasm for such instruction by many officers of those arms.

2. Willets Points

The temporary barracks of the Grant General Hospital at Willets Point became the home of the Battalion of Engineers when the Army of the Potomac was mustered out of service in 1865. While command of the post was given to General J. D. Duane, Major Henry Larcom Abbot was given command of the Battalion. A Military Academy graduate, class of 1854, Abbot was an experienced engineer and heavy artillery officer. His war service included that of engineer, commander of the 1st Connecticut Heavy Artillery, chief topographical engineer for General Bank's New Orleans expedition, and commander of the siege artillery brigade of both Union armies at Petersburg and Richmond during the campaigns of 1864-65.¹⁵

During Abbot's first year of command, the post schools were established by act of Congress. Abbot was one of the few commanding officers to comply with the act by opening a school for soldiers under the following conditions:

Attendance to be voluntary. Those desiring to attend to meet and elect three of their number to constitute a School Committee for the season, whose first duty would be to prepare a classified list of the studies desired. The necessary room, with fire, light, blackboards, tables, etc., to be provided without expense to the scholars; ultimately the Post fund assisted in the purchase of books. This school proved highly successful, the Battalion containing many men desirous to improve themselves by study. Three departments, mathematics, language and English branches were formed,

including arithmetic, algebra, international law, geography, and penmanship. Four officers were detailed in each department, one to be present on three nights for three consecutive weeks from 6:30 to 8:00 p.m. to hear and mark the recitations.¹⁶

Having been improvised during the war to meet the needs of active field service, the battalion's organization had not been recognized by Congress. As most of the active duty engineer officers served with the battalion, the demand for their services, both civil and military, kept most of them away on detached service. On assuming command Abbot found the officer of the day receiving dress parades and first sergeants commanding companies. So depleted of officers was the Battalion by detached service that it often marched under the command of an 'acting' sergeant major. There being no recognized battalion structure, there was no provision for other than an 'acting' sergeant major.¹⁷ By act of Congress, July 28, 1866, however, this deficiency was rectified and the noncommissioned staff of the Battalion increased by the addition of a sergeant major and quartermaster sergeant.¹⁸

The notion of establishing a School for Application for both officers and men was first proposed in October of 1866, during the first inspection of Brigadier General Andrew A. Humphreys, recently appointed to the command of the Corps of Engineers. A much needed laboratory for experimental research by officers and enlisted men was also

proposed. Abbot and Humphreys had collaborated ten years earlier on a survey of the lower Mississippi River, producing a report that became a standard authority on the river into the next century. Abbot found Willetts Point "well suited for the practical instruction of the troops in work of siege including land mining, in military bridge exercises, and in military reconnaissance."¹⁹ It was to prove equally well suited for future missions of the engineers in coast defense, in particular, harbor defense with torpedoes and submarine mines. Actually, the fort had been built for the defense of New York Harbor during the Civil War. It was somewhat ironic that the preliminary plans for the fortifications had been drawn up in 1857 by Captain Robert E. Lee, Corps of Engineers.²⁰

Abbot set up a year-round professional course of instruction for his noncommissioned officers. Winter months included a daily recitation before their officers in field fortifications, the pontoon manual and infantry tactics. There were also company drills in the bayonet exercise "and such other exercises as were suited to the season." Summers were spent in such practical exercises as the construction of a mortar battery, complete with gabions and facines. Models of fronts were constructed upon a scale of 1/12th actual size, each of the companies, eventually four in number, making a model of a different front. Abbot held these models "to be useful in the verbal

instruction of the non-commissioned officers."²¹ Each step in pontooning, mining and countermining, the explosion of mines, and the construction of bridges, was accomplished in these practical exercises. Military map making and instruction were combined with reconnaissance on foot and horseback. Even the neglected art of marksmanship was emphasized.²²

Unlike the Artillery School at Fort Monroe, Virginia, or the Signal School at Fort Greble, D.C., the Engineer School of Application was neither initiated or even recognized by the War Department. In response to Abbot's concern for this lack of formal recognition by the War Department, the Chief of Engineers replied that in his opinion, command of the battalion "carried with it the requisite authority for what was proposed," and so saying, cautioned Abbot to depend on his support should any questions arise.²³ The fort was also the only military engineer depot in the country and was to become the arsenal for all mining and sapping tools, pontoon materials, submarine mines and appliances for torpedo defenses. Research and development added new apparatus to the depot inventory. In 1872, for instance, the first searchlight was successfully tested during night target practice in the harbor.²⁴

3. The Torpedo School

However, the work of most lasting effect conducted at Willets Point during the first twenty years as a school of application was the research connected with submarine mining. In May of 1869 General Humphreys, with the sanction of the Secretary of War, assigned the battalion the duty of developing a torpedo system, as a part of the system of coast defense. Experiments with high explosives led to the development of submarine mines. During the course of these experiments visits were often exchanged with the Naval Torpedo School at Newport, Virginia. By 1875 Abbot had devised a complete system of submarine mining for coast defense. His emphasis on the use of electric detonation by means of cable from shore would have important consequences for the instruction of noncommissioned officers in the care and operation of electrical apparatus. So far did this experimentation develop that President Grant invited special attention to it in his annual message to the Congress in 1875. In recommending further experimentation with torpedoes to that parsimonious body, he extolled the submarine mines as "the most effective and cheapest auxiliary for the defense of harbors, and also in aggressive operations, that we can have."²⁵

By 1880, both torpedo training and the professional

preparation of noncommissioned officers at Willets Point had progressed to such a degree that Chaplain George Gatewood Mullins, officer in charge of education in the army, felt moved to extol the efforts of "that ever-progressive soldier Major Henry L. Abbot," as an object lesson to other officers. Mullins found the noncommissioned officers of the engineers at Willets Point to be among the best educated soldiers in the army.

All non-commissioned officers and certain selected privates study and regularly recite to the commissioned officers of their companies in infantry tactics, pontoon manual, torpedo manual, field fortifications (including mining), practical surveying, and are taught photography.²⁶

On January 10, 1880, Abbot addressed a meeting of the Military Service Institution of the United States on Governors Island concerning the research in submarine mines performed by the engineers and the School of Submarine Mining organized by them at Willets Point. With what he would have his listeners believe to be prudent restraint, Abbot avoided details so as not to tread upon the "forbidden ground" of military secrecy, as he phrased it.²⁷

He did not neglect to cover the role of engineer corps enlisted men. Convinced that the duties of enlisted men working with the submarine mines were particularly sensitive, Abbot required that great care be taken to make their training individual. Such instruction covered the

loading, planting, and handling of the voltaic batteries, the repair and joining of electric cables, use of the telegraph and telephone, mapping the course of vessels "in a word," Abbot informed his fellow officers, "every thing which requires special preparation in time of peace before any troops can be trusted to perform in front of the enemy. Written reports are required weekly, from the officers on duty with the detail under training, and these are carefully a matter of official record."²⁸

The artillerymen in the audience listened with no small amount of attention. As he spoke, one question became obvious to them;

considering the comparatively small number of officers in our engineer corps, and the fact that other important military duties in time of war, would call the greater number of them away from the points where torpedoes would be used in defending our coasts and harbors, thus necessarily leaving to the artillery officers, in most instances, the management of such defensive appliances, whether it would not be well that the latter should, in time of peace, be instructed in their manufacture and use?²⁹

The reluctance of the engineers to share their mines with the artillerymen was circumvented on August 30, 1880, when, seven months after Abbot's address to the Military Service Institution, and just five months since his promotion to lieutenant colonel, General Sherman issued an order through the Adjutant General's Office which gave official recognition to Willets Point as a Torpedo School.

One lieutenant from each regiment of artillery would be detailed for instruction in torpedo service at Willets Point. Battalion orders of January 3, 1881, graciously gave these artillerymen in all respects the same advantages as the engineers.³⁰ The Engineer School, however, continued without official recognition. Aided by qualified sergeants, officers on the weekly torpedo detail instructed the enlisted men of the battalion in such skills as loading torpedoes, charging junction boxes, making joints in electric cables, and operating the dial telephone. In the summer months the soldiers were trained to plant, raise and fire mines, and boat operations through the use of pontoons, pontoon rafts, a small steam launch, and a new steam boat.³¹

Lieutenant Colonel Abbot would visit England twice. In 1875, he traveled to Europe to make contracts for submarine mining cable and to examine systems of harbor defense utilizing submarine mines and torpedoes in Great Britain, Germany, Austria, and France. The engineers of the United States Army were, at that time, charged with the fortifications of harbors and experimentation with mines, torpedoes and other apparatus used in coast defense. He went again in 1883 as part of a joint Army and Navy board to report on providing steel cannon.

While in England he visited the Royal Engineer Establishment at Chatham. There he observed the enlisted

men being instructed by their noncommissioned and warrant officers, the offices being allowed to do nothing except witness the training. As in civilian society in England, formal technical education was a rarity in the army, with the exception of the meritocratic 'scientific corps,' the Royal Engineers and the Royal Artillery. The first course of instruction for noncommissioned officers in military engineering, for instance, began in 1812 at the Royal Engineer establishment at Chathan.³² Upon returning to civilian life, these ex-sappers often rose quickly in the management of both commercial and government offices.³³

Abbot's official report noted the following observations:

The soldiers are drilled as infantry and trained in shopwork, such as carpentry, lathe work, carriage and wheelwright work, iron casting, iron turning, & c. I saw one squad engaged in welding a wagon axle. Beside this they have the usual exercises in sapping and mining, field fortifications, tube well-boring, pontoniering, military telegraphy, & c. My chief attention was given to the torpedo department....³⁴

That Abbot found the information interesting and highly reportable is indicated by its conclusion in his sixteen-page report, the sole example of training to be found in the narrative.

On February 20, 1885, the Chief of Engineers, Brigadier General John Newton, submitted to the Secretary of War a report of the Board of Engineers and

Fortifications upon the reorganization of the Engineer School of Application. It suggested instruction of noncommissioned officers in foot reconnaissance, map making, photography, multiplication of maps in the field, simple reconnoitering, surveying, use of the barometer, and torpedo drill. It further recommended the preparation of a torpedo manual to aid in instruction. Endorsement by the Secretary was followed by the long deferred formal recognition of the school by the War Department.³⁵ Although Colonel Abbot's tenure as commandant ended the next year, his influence on the school continued through his membership on the Board of Visitors until 1889.³⁶

Through a judicious use of the small allotments of funds available, supplemented by the labor of the men of the garrison, substantial improvements on the facilities for enlisted education were made by the close of the fiscal year for 1890. An appropriation of \$6,500 provided for the rebuilding of the laboratory for enlisted men, to include new benches, tool boxes, and equipment, along with an addition to this building for engines, boilers and dynamos used in connection with electrical experimentation on the fish torpedo and searchlights.³⁷

On September 24, 1890, the official title of the engineer school was changed to United States Engineer School, but instruction continued unabated as did experimentation, such as that with the Sims-Edison fish

torpedo in 1891. Propelled by electricity, it "raced through the water at the 'incredible' speed of ten miles an hour, playing havoc with the morale of the local fishermen." A model of a military mine, intricately hand crafted by a Lance Corporal Von Shon, along with many other articles from the Willets Point museum, were exhibited at the Chicago World's Fair in 1893.³⁸

The year 1895 saw Colonel Abbot retire from service, and the expiration of his term on the executive committee of The Military Service Institution. Major General Howard, classmate of Abbot's at the Military Academy, had retired the previous year, having served as vice-president of that professional organization.³⁹ From its headquarters on Governors Island, New York Harbor, the Institution had exercised a progressive influence on the officer corps of the army over the sixteen years of its existence, mainly through its bimonthly publication, the Journal of the Military Service Institution of the United States.

Just two years before, Abbot, drawing on his visits to Europe years earlier, used the pages of the Journal to suggest that the army take advantage of "the extraordinary desire for office among our people," by imitating German policy and providing civil employment certificates to long service noncommissioned officers as a reward for faithful service, "entitling the holder to preference in certain classes of Government employ."⁴⁰ Such men were not

lacking; there was always a steady stream of requests by discharged noncommissioned officers for employment as civilian clerks and messengers, for instance, with the military departments and the War Department.⁴¹ "I am convinced," Abbot stated, "that it might extend with advantage to many employees of the Quartermaster and Engineer Departments. In fact several deserving ex-soldiers of the Battalion of Engineers are now employed on public works, both civil and military, as foremen, draughtsmen, and even in higher grades."⁴² By his suggestion, Abbot gave scant praise to the noncommissioned officers without whom his beloved scientific corps, the engineers, could not have been able to perform the magnificent feats of military and civil engineering upon which their reputation rested.

In 1898, President McKinley ordered the fort at Willets Point to be known as and designated Fort Totten in honor of Brigadier General Joseph G. Totten, Chief of Army Engineers at the time of his death in 1864.⁴³ With the opening of the war with Spain, instruction at the schools was virtually suspended. The next year, the Battalion Engineers lost its independent status and became a part of the line of the Army.⁴⁴

4. Fort Monroe

From its establishment as the 'Artillery Corps for Instruction,' by Secretary of War Calhoun in 1824, progress in the instruction of both commissioned and noncommissioned officers at the first of the special service schools was dependent upon the ingenuity of the school commandants. As most of the duty positions at the school were not provided for by Congress, the commandant detailed artillery regimental staff officers as instructors and artillery noncommissioned officers as sergeant major, quartermaster sergeant and commissary sergeant.⁴⁵

From 1825, daily classes were conducted for noncommissioned officers and selected private in mathematics, from noon until 3:00 P.M., continuing erratically for want of a qualified instructor. Eventually a Noncommissioned Officers' School, to include laboratory instruction, was established under the general supervision of an officer detailed by the commandant as director, assisted by two subalterns detailed from the companies on post. Examinations were held semi-annually, beginning in September and March.⁴⁶

Fort Monroe languished during the egalitarian 1830s and 1840s but was revived in 1858 as the 'Artillery School of Practice.' Fort Monroe "had but little of the school

feature about it," however, "and was nothing more than a well regulated artillery post." Unending infantry drill, and monotonous artillery drill on the antiquated cast iron smooth bores, to include "everything laid down in the tactics, except firing the guns," was the extent of training. Eight small companies of forty men each made up the garrison.⁴⁷

This training was interrupted in 1860 by a more rigorous course of study on the field of battle where ammunition was not limited by regulation. Following the Civil War, the school was revived once again, in 1867, by Grant. Under the command of Colonel William F. Barry from 1867 until 1877, many serious improvements were made: a printing press was obtained; an artillery museum organized; carte-blanche obtained for the expenditure of powder and projectiles in practice; a professional library of 1500 volumes relating to artillery collected; and a laboratory equipped.⁴⁸

Under the new commandant, the instruction of noncommissioned officers progressed. One of each of the five instruction batteries was assigned to the guns by monthly rotation. Each month, the noncommissioned officers of the battery were personally examined by Colonel Barry. A report, together with his remarks as to the proficiency of each noncommissioned officer, was forwarded to the Adjutant General of the Army.⁴⁹

All noncommissioned officers of the five instruction batteries were required to attend the school for noncommissioned officers for one full years' course of instruction. The curriculum was both practical and theoretical, and very similar to that offered the commissioned officers, but geared to the duties of noncommissioned officers and limited by the average capacity of the students. Many of the theoretical subjects would be found in any post school: mathematics, United States history, geography, reading, and writing. Mathematics being an especially important discipline for artillerymen, the more advanced noncommissioned officers progressed to equations of the second degree in algebra. The unimaginative method of instruction was similar to that given at any post school; recitations at the black board and answering questions were the extent of most instructional methods. The practical portion of the course was pursued pari pasu with that of the commissioned officers, and covered tactics of heavy artillery, school of the piece, light artillery, and Robert's Handbook of Artillery, Army Regulations, and the Articles of War. Between 1867 and 1871, more than one hundred enlisted men, most of whom were noncommissioned officers, were presented with engraved certificates, signed by the staff of the school, attesting to their having completed the entire twelve-month course of instruction. And it became the

practice to detail student officers from the Artillery School to give the instruction to the noncommissioned officers.⁵⁰

Major John Caldwell Tidball, a West Point graduate of 1848 and artillery officer, who had acquired a reputation for gallantry during the Peninsula campaign, was appointed superintendent of artillery instruction from 1874 until 1881. During that period he completed his Manual of Heavy Artillery Service, a work that was to become a standard text for many years.⁵¹

During the third year of Tidball's tour, Colonel Emory Upton, having just returned from a two-year tour of Asia and Europe, was appointed superintendent of theoretical instruction at the school through the aid of the Commanding General, William T. Sherman.⁵² As an artilleryman, Upton was most aware of the inadequate state of equipment and the obsolescent condition of weapons in the Regular Army, not to mention the state forces. The little army of 1880 was virtually a national constabulary, still preoccupied with domestic missions, such as fighting Indians, policing the territories, and quelling labor unrest. Remoteness from the military powers of Europe had placed the United States under the delusion, he believed, of freedom from foreign invasion. His assignment at Fort Monroe must have kept the notion of coast defense and the woefully inadequate state of those defenses fresh in his mind. A visiting

Senator assured him in 1880, while observing the "worthless smooth bore artillery" firing, "that we would not have another war in a century."⁵³ Upton soon after resigned, committing suicide the following year, the result of frequent seizures caused by a brain tumor.

In 1881, Tidball left the artillery school to replace General McCook as General Sherman's aide-de-camp, a position from which his progressive point of view would only benefit from a better perspective. It was General Howard's opinion that Tidball shared McCook's "deep interest" in the education of the enlisted men of the army.⁵⁴ As he began his duties, Sherman was in the process of founding the School for Application for Infantry and Cavalry at Fort Leavenworth, Kansas. Tidball admired Sherman as "a great advocate of military education," and for having taken "a fostering interest in the Artillery School at Fort Monroe."⁵⁵

Within a year Tidball was back at Fort Monroe, this time performing an inspection for the Commanding General. He found the facilities increased under Colonel George W. Getty, through larger annual appropriations from Congress. A building with library, reading and class rooms for enlisted men had been added. Noncommissioned officers posted to the fort with the instruction batteries were now enrolled in courses that extended over two years, the old one-year course having been expanded in 1876.⁵⁶

Certificates for proficiency were awarded noncommissioned officers successfully examined by the staff of the school and such graduates were excused from further attendance. Divided into four terms, such diverse subjects as the use of instruments, Tidball's Manual, gunnery, use and care of machine guns, surveying, fortifications, high explosives, electricity, hygiene, moving boilers and machines, and the 'Tactics' were taught.⁵⁷

Tidball was greatly disturbed by one thing, however. The use of submarine mines in harbor and coast defense had grown most important in recent years. The artillerymen believed that the submarine mines would "naturally fall to the artillery branch of the service." How regrettable it was, in Tidball's estimation, that "all efforts to obtain a few cases and other appliances [for training purposes] have proved abortive." The engineers at Willets Point would not part with their mines. Secrecy, they argued, was the logic of their position.⁵⁸

Although General Sherman took a great interest in the research on submarine mining and frequently visited the Battalion of Engineers at Willets Point, even he was frustrated in any attempts to influence that branch of the service.⁵⁹ Under the bureau system of that time, commanders did not respond directly to the commanding general, but rather to their bureau chiefs. "With the Engineer School at Willets Point," Tidball noted, General

Sherman, "had nothing to do, the control of it being exclusively in the hands of the Engineer bureau which guarded its rights with jealous care."⁶⁰

Sheridan succeeded Sherman as commander in chief in 1883. Upon Sherman's retirement the next year, Tidball returned to the Artillery School as commandant. As coast defenses were upgraded, the need for skilled technicians multiplied. Tidball, therefore, gave special attention to the practical instruction of his noncommissioned officers. "There is a demand," he reported, "for the services of men who are trained as clerks, electricians, telegraphers, chemists, photographers, mechanics, printers, lithographers, book-binders, riggers and steam and mechanical engineers. Men are found possessing sufficient practical knowledge for immediate use, who by taking advantage of their opportunities, while rendering valuable service to the school, gain greatly in proficiency in their several vocations." Neither did he neglect their training as soldiers. During the winter months, artillery and infantry tactics and the duties of guards were stressed. The most qualified noncommissioned officers received instruction in surveying.⁶¹

5. The Endicott Board and the Artillery Council

The post-war experience of the artillery units stationed at the coastal fortifications slowly degenerated to that which maintained before the war. With the exception of Fort Monroe, and the major harbors of New York, Boston and San Francisco, practice firing on the obsolete guns virtually ceased. Lacking the material with which to train in their coast defense mission, the artillerymen returned to infantry drill with the musket, earning the derisive appellation of "red-legged infantry," red being the color of the facings on their uniforms.⁶²

While the military services stagnated during the 1880s, foreign powers continued to modernize. The addition of rifled cannon and armor to warships rendered both the naval and the coast defenses of the United States useless. Even Chile possessed a navy superior to that of the United States. "The paraphernalia for action simply did not exist," as one historian has aptly observed.⁶³ When Congress authorized three steel cruisers in 1883, a military revival of the obsolete ships and the forts that supported them was begun by the Cleveland administration.

The 'gun foundry board' of 1883-84 was followed in 1885 by a nine-member board convened under the new Secretary of War, William C. Endicott, to make recommendations on the coast fortifications. The

composition of the board included two civilians, the rest being naval and army officers. Among the latter were the Chiefs of Ordnance and Engineers, and Lieutenant Colonel Abbot. The board's final plan called for a mix of high-powered guns and mortars, the whole to be supplemented by mine-laying in the harbors. Guns in great numbers being most costly, the board stressed the utility of submarine defense, calling for moveable torpedoes and submarine mines, operated either by contact or electric currents managed by shore operation. The mine fields would be supported by electric searchlights, machine guns and torpedo boats.⁶⁴ This proclivity of the board for mining might certainly be attributed to the influence of Abbot.

The response of the artillery corps to the prominence thrust upon them by their fate as the front line of defense against the modernizing navies of Europe was predictable; they desired a status distinct from the line of the army. Organization as a "scientific corps" similar to the corps of engineers became a goal for the artillery academics. A more general interest was reorganization of the artillery into two distinct branches: field or light artillery, and heavy or seacoast artillery. But most importantly, the artillerymen urged that a chief of artillery be appointed and a bureau of artillery created. With a bureau and a chief of artillery, their interests would be well-looked after in Washington, as was the case with the engineers

corps and the ordnance department.⁶⁵

A practical step toward these goals was attempted when a group of officers at the Artillery School at Fort Monroe proposed that an artillery council be organized. With the permission of General Schofield, commanding the Division of the Atlantic, the council assembled at Governors Island, New York Harbor, on the 3rd of October, 1887, where, but ten short months before, was witnessed the fiery debate on compulsory education, sponsored by the Military Service Institution of the United States. Four of the five regiments of artillery were stationed in Schofield's division, and he took an abiding interest in that branch. Schofield suggested to Congress the addition of two more artillery regiments to care for the new coast defense works and to provide instruction of the militia artillery reserves. Although the draft bill proposed by the council received no immediate practical results, the proposals would eventually be enacted as new weapons were introduced and the threat of foreign invasion increased.⁶⁶

Understanding the need of skilled technicians to any genuine attempts at modernization, the council made significant appeals for such men. In calling for a doubling of the fifty "mechanical engineers" then authorized the artillery, and a concurrent increase in their rank and pay to that given ordnance sergeants, the council presented the following rationalization for its

recommendation.

The machines used in the manipulation of the guns now on hand are of a nature demanding the attention of expert mechanics, and as the new armament comes in, and is put in position, steam and electricity will become essential adjuncts to the service of the guns. Besides, the presence of such men at artillery stations even now would be an economy, for many an expensive machine had been rendered useless for the want of the timely attention of a skilled mechanic. It is impossible to procure skilled machinists - men who are able to make or mend the most complicated machines, run steam engines, or attend to the electrical outfit of a modern fort - for the pay and allowances of artificers, who are merely blacksmiths, wheelwrights, or saddlers. Hence the necessity for the new grade. It is important that the mechanical engineer of artillery should be an enlisted man, otherwise he might terminate his contract with the government at the very moment when his services were indispensable.⁶⁷

Looking at the higher rates of pay given noncommissioned officers of the corps of engineers, the council further recommended and across-the-board increase in the pay of all artillery noncommissioned officers in order to give them parity with those noncommissioned officers of the engineers corps and ordnance department.

In view of the high order of intelligence necessary for the service of modern sea-coast artillery, which now requires a more reliable body of non-commissioned officers than that of any other branch of service, this increase of pay is not considered unreasonable by the Council. The pay of mechanical engineers is fixed at fifty dollars per month, which in view of the service to be rendered by them is the least amount which it was thought by the Council would secure reliable mechanics.⁶⁸

As to the instruction of the noncommissioned officers and privates of artillery, the Council made a strong recommendation that both practical and theoretical courses of instruction, seven and four months in duration respectively, be mandated at each post garrisoned by not less than one battery of artillery, and that the senior artillery officer be in supervision of instruction. Attendance at all instruction would be compulsory.

During the four months of each year set apart for the purpose, there shall be maintained at each artillery post where one or more batteries of artillery may be stationed, a day school for the instruction of the enlisted men. The sessions of the school will not exceed one hour and a half each, and will take the place of the drills and other practical instruction given during the remainder of the year....The course of instruction will embrace reading, writing, arithmetic, elementary algebra, geometry, trigonometry, and military surveying; practical electricity, artillery material; the use of maps and globes, and so much of the Army Regulations as pertains to field and garrison duties. Only such portions of the various subject shall be taught as will enable the enlisted men to handle the machines, and understand the practical problems connected with their artillery duties, and the text books shall be arranged accordingly. Attendance at the school shall be compulsory; the instruction shall be proportioned to the abilities and requirements of the men, and the instructors shall be commissioned officers, assisted by such non-commissioned officers as may be necessary.⁶⁹

In August of the following year, 1888, General Schofield was appointed Commanding General of the Army. As a consequence of both the council's report and Schofield's

interest in the council and the artillery branch, in December, the Adjutant General ordered all noncommissioned officers of artillery be taught "the principles of graduating sights, pointing guns, and mortars, and the causes that affect the flight of the projectile, especially those due to improper loading, the rifling, and the wind." Two weeks field training in giving direction and elevation were also directed. In fact, this order simply extended to the rest of the army the system of instruction Schofield had maintained while commanding the Division of the Atlantic.⁷⁰ And in anticipation of the need to train artillerymen in the use of the new apparatus with which they would be equipped as a consequence of the reforms recommended by the Endicott Board, the next year Schofield ordered further instruction in "the use of plane tables, telescopic and other sights, electrical firing-machines, chronographs, velocimeters, anemometers, and other meteorological instruments, stop-watches, signaling, telegraphy, vessel tracking, judging distances, and, in short, everything essential to the scientific use of the guns."⁷¹

Although this amounted to the Council's only immediate success, the seeds of change became firmly planted in the minds of most artillerymen. In order to implement such technical instruction, books suited to the instruction of artillery noncommissioned officers were written by

interested artillery officers and printed on both the press of the Artillery School and that of the Government Printing Office. Besides the publication in 1890 of A Course of Instruction for Non-Commissioned Officers, by First Lieutenant Harvey Carbaugh, the following texts for artillerymen would be published in 1893 as Artillery Circulars under the direction of then General Schofield: Course of instruction for Artillery Gunners: Permanent Works and Their Attack by Siege Operations, by Captain James Chester, and Mathematics for Artillery Gunners, by Captain Arthur Murray.⁷²

And at Fort Monroe, the Noncommissioned Officers' School, first begun in 1868, would graduate no less than 417 men by 1893.⁷³ For thirty-years this institution led the way in the professional instruction of noncommissioned officers of artillery. The instruction therein being given by student officers detailed from the classes of the Artillery School, there can be little doubt that many of those student officers returned to their regiments, after their own graduation, confirmed and practicing believers in the education of their noncommissioned officers. So not only did the Noncommissioned Officers' School at Fort Monroe educate enlisted men, but it also provided another dimension to the professional preparation of those commissioned officers who were detailed as instructors of the noncommissioned officers and selected privates of their school.

_____ VIII _____

NONCOMMISSIONED OFFICERS OF COAST DEFENSE

The year 1898, twelve years after the recommendations of the Endicott Board were adopted by the Congress, found only 151 of the proposed 2,362 guns in place at the coast fortifications.¹ The expense of the guns and their rapid obsolescence due to newer classes of battleships and cruisers, along with improved naval ordnance, dampened the enthusiasm of Congress to make the necessary appropriations, while increasing the importance of the mission of the Torpedo School at Fort Totten. As the most economical weapon in the coast defense arsenal, the submarine mines were favored by both Congress and the taxpayers as the solution to the perennial problem of the burgeoning budget for coast defense.

1. Fort Totten

During Elihu Root's term as Secretary of War, 1899-

1904, the mission of Fort Totten became exclusively that of coast defense. Unlike earlier periods in the history of coast and harbor defense, after the 1890s, from half to three-quarters of the expenditures for the fortifications went for guns and carriages. There was also a shift from vertical-walled forts to low-profile, reinforced concrete gun emplacements. The emphasis was more on armament and less on structure.² And the new armament relied heavily on the use of electricity.

Root saw the failure to "provide an adequate force of [properly trained and instructed] men to care for, preserve, and become familiar with the use of the guns and [electrical] machinery," as the major problem with the coast fortifications. "This is practically a new requirement for the army," reasoned Root. "It did not exist to any considerable extent prior to the building of the new fortifications."³ In 1899, his determination to increase the coast defense force led to the addition to each post garrison by coast artillery, heaving electrical appliances, of one electrician sergeant with the pay and allowances of an ordnance sergeant.⁴ To this end, a "school for electrician sergeants" was established at Fort Monroe on December 22, 1899, and made a part of the Artillery School pursuant to General Order No. 71, Adjutant General's Office, 1900.⁵

It proved no surprise for any engineer to learn that

the artillery coveted the engineer's submarine mines. The Spanish American War had revealed defects in the mining system, and while the engineers were busy trying to remedy those faults, the artillery, as one embittered engineer recalled, "began to agitate for the transfer to them of all the submarine mine business, urging that [the artillery] was so intimately connected with the gun defense of a harbor that it should pertain to them." Although the engineers had developed these weapons, their time as the sole employers of the mines had run its course. Their feeble reply to the artillerymen's claim to the submarine defenses was that in the English army the mines were still a function of the Royal Engineers.⁶

To the delight of the artillerymen, the Torpedo School was transferred from the care of the engineers to that of the artillery as a consequence of the act of February 2, 1901, which charged the coast artillery with the care and use of the fixed and movable elements of land and coast fortifications, including the submarine mine and torpedo defense. Major Arthur Murray, Artillery Corps, was appointed as Commandant of the School of Submarine Defense.⁷ Furthermore, the name of the engineer school was again changed to Engineer school of Application, and the establishment moved to Washington Barracks, D.C.⁸ The rivalry between the engineers, charged with the construction of coast fortifications along with research in

submarine weapons, and the artillerymen, caretakers of the great coast guns, over the control of the submarine defense system was finally decided; hereafter, to the artillery belonged all the weapons of coast defense. And, as if by way of providing a suitable irony to this event, the Royal Engineers lost their mines as well; they went, however, not the Royal Artillery, but rather to the 'senior service,' the Royal Navy.⁹

Lieutenant Colonel John P. Story, commandant of the Artillery School, was not reluctant to voice publicly his concerns in regard to the inefficient manner in which the engineer corps had managed the mining defenses. For lack of qualified personnel, the mining material was under the care of civilians paid from the appropriations of the Engineer Department. For Story, the most important and pressing problem for the artillery was "to provide officers and men qualified to operate the mining defenses of our harbors." He recommended the replacement of civilians by electrician sergeants, and furthermore, that "one additional electrician Sergeant [sic] be authorized by law for each harbor of the United States equipped with mining material."¹⁰ Pursuant to General Orders No. 157, Adjutant General's Office, 1901, the "school for electrician sergeants" at Fort Monroe, was transferred to the School of Submarine Defense, at Fort Totten.¹¹

2. Electrician Sergeants

The act of February 2, 1902, also provided for a chief of artillery. The Secretary of War charged him with the "general supervision of the instruction of artillery officers and men and of examinations for promotion and for appointments...and shall recommend such examinations and such courses and methods of instruction in the artillery schools and otherwise as he shall deem requisite to secure a thoroughly trained and educated force." Although considered a part of the post noncommissioned staff and not officially belonging to the Artillery Corps, the electrician sergeants were required to submit personal reports to the Chief of Artillery and worked only with coast fortifications.¹²

Over the years that electric plants became put to use in the coast defense fortifications, new uses for electricity suggested themselves. By the turn of the century, electricity in connection with seacoast defense had become a necessity. Electricity progressed from its first utility as a source of power for lights to the current that powered motors which operated both ammunition hoists and the gun platform hoists, searchlights, and the range finding, fire control and direction systems. It had been the policy of the engineers to hire civilian

electricians or electrical engineers under contract to maintain the power plants at each coast defense fortification. These civilians had been paid from the general appropriations of the Engineer Department. "It is needless to say that this arrangement was not satisfactory to the artillery," remarked one sardonic engineer. The main task of the new electrician sergeants would be to take over the electrical plants of the various coast defense fortifications from the operation of the civilian electricians employed by the Engineer Department.¹³

In order to train the 100 electrician sergeants authorized, a special division was established at the School of Submarine Defense, and a course of six months' duration begun. While classes were limited to 40 students per year, actual classes were much smaller, ranging from 11 to 28 the first three years. The theoretical part of the course covered arithmetic, electricity and magnetism, elementary physics, oil engines, steam boilers and engines, submarine mines, telephones, telautographs (a telegraphic apparatus by which hand writing and drawings might be reproduced at a distance, first used in 1893), and army regulations. Practical work included machine shop practice, to include bench work, lathes, milling machines, repair of boilers, engines, dynamos and motors; care and operation of electric batteries, generators, electrical wiring, oil engines, steam boilers, engines, dynamos,

motors and searchlights, and the use of tools and machines.¹⁴

Candidates for appointment as electrician sergeants from among "trained soldiers of good habits" with the requisite technical ability and "some knowledge of property accountability," were also required to have studied a practical course in electricity for a least one year, have the recommendation of their commanding officer, and pass a qualifying examination. A civilian might enlist as a private of artillery with the intention of attending the school, providing he could pass a preliminary examination and be accepted by the school commandant. An honorable discharge was given any such enlistee who failed the final examination and did not wish to continue his enlistment. Both military and civilian candidates needed to be at the time of appointment unmarried, under 30 years of age, and of good character.¹⁵ Twenty-four students attended instruction at the Electrician Sergeants' School in 1903: six were already sergeants, two were corporals, and sixteen of whom were privates.¹⁶

The need for more highly qualified electricians led, in 1903, to the authorization of 25 'master electricians' for the Artillery Corps, also to serve as members of the post noncommissioned staff. Both military and civilian applicants were invited to apply. All candidates needed to produce certificates to the commandant of the School of

Submarine Defense proving satisfactory completion of a background course of study to include mathematics, geometry and trigonometry, physics, electricity, mechanical drawing, three years of practical training in the use and care of steam and oil engines, machines and machinists' tools and electrical appliances and apparatus. Recommendations from commanding officers of soldiers and school principals and former employers for civilians, attesting to "habits of industry and sobriety," were also required.¹⁷

Having provided their credentials, each candidate still faced two examinations. The first was a theoretical examination prepared by the Torpedo Board. The second was a practical examination to be conducted at Willets Point, extending "through a period not to exceed two months."¹⁸ These demanding requirements exceed the qualifications of many would-be candidates.

Having been announced in electrical journals and other periodicals, a theoretical examination of applicants was held at various places throughout the country on June 25th, and passed by only eight electrician sergeants and two civilians. Four of the sergeants, however, were rejected because they were married. The remaining six candidates satisfactorily completed the practical examination on October 2nd, and were recommended by the torpedo board for appointment as master electricians. As to the four married sergeants, the ancient and honorable military expedient of

the waiver was applied for and granted, and they were subsequently graduated with the next class on June 3, 1904.¹⁹

The number of civilian applicants for the position of master electrician was most disappointing as was the number of candidates actually able to pass the qualifying examinations. As one artillery officers noted, "the requirements in the examination for master electrician are such that but a few electricians who are not college graduates can pass it." And then again, "where can an electrical engineer be obtained in civil life at a compensation of seventy-five dollars a month?"²⁰

It became obvious to Captain C. F. Parker, Artillery Corps, instructor of the electrician sergeants' division at Fort Totten, that the army would "have to educate our own men as most large corporations are now doing." He furthermore suggested practical work at posts be "supplemented by well-directed theoretical instruction," of soldiers "capable and desirous of becoming electrician sergeants." For the purpose of enabling men to use self-help methods, and as a complement to the electrician sergeants' division, he recommend a correspondence school based on civilian models be started.²¹

Part of the difficulty in attracting qualified civilian and military candidates was the lack of adequate inducements offered. Secretary of War Taft recommended

higher rates of pay, as then maintained in the United States Navy, for men with "a considerable knowledge of electricity and a skill in assembling and manipulating various kinds of electrical apparatus in general use in the commercial world," as a way of retaining them in service. Major William E. Ellis, Coast Artillery, recommended the creation of the grade of 'warrant officer' for such highly skilled soldier as was the usage in the British service and in the United States Navy.²²

The efforts to instruct the electrician sergeants produced mixed results, however. As the new electrician sergeants took over the power plants, some proved competent, while others, as the engineers derisively point out, allowed the plants "to deteriorate through neglect or ignorance."²³

3. Submarine Defense

In 1902, the last vestige of the Corps of Engineers was removed from Fort Totten when the Engineer Depot was closed. Five companies of the Coast Artillery Corps moved in.²⁴ Captain George F. Landers, the commanding officer of the 54th Coast Artillery Company, was appointed Instructor in the School of Submarine Defense, and placed in charge of all submarine mining materials in the Artillery District of

East New York.²⁵ In January of the following year, the 54th Coast Artillery Company was designated as the 'Torpedo Company,' and its strength increased from 109 to 140 men by the addition of 31 privates. When prepared in submarine mining, 33 1/3 percent of the company's enlisted strength was to be transferred to other posts. Two and a half hours daily were devoted to instruction of the men in such topics as the use of angle-measuring instruments and plotting boards; duties in the loading room and on the water; knots and elementary cordage; care and preservation of submarine-mine material; and the handling of high explosives, use of telephones, and electric-light wiring. Examining boards, composed of three officers, designated members of the company as qualifying as first or second class gunners.²⁶

Evidently, the general education of enough of the coast artillerymen was deficient to a degree serious enough to warrant reopening the post school, which had been closed when the engineers left Fort Totten. Special Orders No. 178, Coast Artillery, Fort Totten, November 2, 1903, directed the opening of the post school.²⁷ At a time when the efficiency of the schools was being disparaged by everyone from division commanders on down, the post schools at both Forts Totten and Monroe were rated in 1904 as being "satisfactory to those exacting the highest education for the Army," by Major General Henry C. Corbin, commanding officer of the Division of the Atlantic.²⁸

Soon after the submarine mining was turned over to the Artillery, that branch set about to thoroughly revamp the entire system. To that end, the so-called "Torpedo Board" was organized. Given the large appropriations made by Congress to the coast artillery, along with the rapid developments made commercially in electrical appliances, the board's mission was timely. The board so thoroughly revised the mining system that only the casings and a few electrical devices were retained.²⁹ As a consequence, only officers and noncommissioned officers trained on these new mines would be familiar with them in future. It was now the turn of the artillery corps to plead confidentially. Engineers would have to go to an artillery school in order to learn about the submarine mines.³⁰

In 1905, at the behest of President Roosevelt, Secretary of War Taft created a new board of officers of the army and navy to revise the Endicott Board program by incorporating the latest techniques and devices. Their charge from the president was "to recommend the armament, fixed and floating, mobile torpedoes, submarine mines, and all other appliances that may be necessary to complete the harbor defense with the most economical and advantageous expenditures of money." Had there been any doubts as to the importance torpedoes and mines would play in the future of coast defense, the board dispelled them by recommending the addition to the coast defense arsenal of fixed,

floating, and mobile torpedoes and submarine mines.³¹ As to the electrical power plants at each fortification, the Taft Board was emphatic in its recommendation: "That all electrical power plants for the use of fortifications shall be operated by the Artillery."³²

It would take just short of two years to train the first group of men from the Torpedo Company in submarine mining. In December of 1905, forty-seven men of the 54th Coast Artillery Company, the required 33-1/3 percent, were transferred to various other Coast Artillery companies. These men were replaced by fifty-three new men transferred from other companies of Coast Artillery. The next transfer would not occur until 1907, when twenty men of the Torpedo Company would be sent to the Philippine Islands.³³

4. Fort Monroe: Department of Enlisted Specialists

Although pay changed little between 1872 and 1908, new specialties were added by Congress after the creation of an artillery 'corps' of 30 batteries of field artillery and 126 companies of coast artillery in 1901. Among the new types of specialist noncommissioned officer created over the next few years in the coast artillery companies were various grades of electrician sergeants, gunners, and fire control specialists, also designated 'mechanics,' or

'firemen.'

The acquisition of the submarine mines by the Artillery actually led to a renewed interest in gunnery. The 12-inch rifled gun was the mainstay of the seacoast fortifications between 1890 and 1910. However, due to it being "axiomatic that mine fields must be well covered by rapid fire guns," the Artillery began to increase training with its short range guns, both 3-inch and 6-inch rifled guns in order to offer that needed protection.³⁴

As had been the case at Fort Totten with the electrician and torpedo classes, technology was forcing the artillery school to create new specialties and provide instruction therein. In 1902, the Adjutant General's Office issued General Orders No. 41, May 5, 1902, and No. 57, which authorized a gunner specialist class at Fort Monroe to commence instruction on October 20. Entrance to the course was gained by competitive examination administered in each artillery district.³⁵ The next year, the name of the school became known as the 'School for Master Gunners.'³⁶ This eight-month course covered algebra, to include quadratic equations; plane geometry; plane trigonometry; surveying; elements of optics; mechanical line drawing; use of angle measuring instruments and adjustment; the construction of difference charts and plotting boards; the use of range tables and range scales; and instruction in photography and the making of blue

prints.³⁷ In 1904, the School for Master Gunners became a part of the new Department of Enlisted Specialists at the Artillery School. Classes averaged about twenty-one men, while it was estimated that each company of coast artillery needed no less than three master gunners.³⁸

'Sergeant school teachers,' with a monthly pay rate of \$41, were also authorized for the school as an extra duty for qualified noncommissioned officers. Duty and special duty positions were allocated in several skills:

Table 1. Monthly Pay Scale for Duty/Special Duty
Noncommissioned Officers of the Coast Artillery, 1904 (58th
Cong, 3d Sess, House Doc. No. 2, vol III, 18-19)³⁹

<u>Rank</u>	<u>Monthly Base Pay</u>
First Sergeant	\$32
Sergeant observer	\$26
Gun Commander	\$25
Observer	\$23
Chief Plotter	\$21
Gun Commander	\$21

According to Brigadier General Arthur Murray, Chief of Artillery, there existed a serious deficiency in both the trained personnel and equipment; "neither is in even approximately proper condition for instruction in time of peace," he reported. Murray recommend the creation of

"new pay grades...with appropriate pay connected therewith for expert enlisted men of coast artillery."⁴⁰

In 1907, the Artillery Corps was separated into two sections, the Coast Artillery and the Field Artillery, with the Chief of Artillery designated as the Chief of Coast Artillery. The Coast Artillery Corps was charged with the care and use of the coast fortifications. Section 11 of the act of January 25, 1907 gave some relief to noncommissioned staff officers by establishing additional pay for certain of them, such as electricians and plotters, and fixing their number, with the proviso that no enlisted man should receive "more than one addition to his pay."⁴¹ The number of enlisted specialists continued to grow.

The reformers had hoped that Secretary of War Root would take action on the proposals "to have the non-commissioned grades in the army made more respectable and better paid positions," but that was not to be.⁴² It was his successor, Secretary of War William Howard Taft who, in 1908, would finally urge the Congress to give the first new pay rates for enlisted men since 1872. A proliferation of new grades were added, many of them for the Coast Artillery. Noncommissioned officers of the line found themselves poor cousins to the noncommissioned specialists of the Coast Artillery. The tables that follow show this disparity in pay. Note that the base pay increased for each rank, up to thirty years service.

Table 2. Monthly Pay Scales for Line Noncommissioned Officers, 1908⁴³

<u>Rank</u>	<u>Monthly Base Pay</u>
Regimental Sergeant Major	\$34
Battalion/Squadron Sergeant Major	\$25
First Sergeant	\$25
Sergeant	\$18
Corporal	\$15

Table 3. Monthly Pay Scale for Noncommissioned Officers of the Coast Artillery Corps, 1908⁴⁴

<u>Rank</u>	<u>Monthly Base Pay</u>
Master Electrician	\$75
Engineer	\$65
Electrician-Sergeant, First Class	\$45
Electrician-Sergeant, Second Class	\$35
Sergeant-Major, Senior Grade	\$34
Master Gunner	\$34
Fireman	\$30
Sergeant-Major, Junior Grade	\$25
Mechanic	\$18

Along with the separation of the artillery in 1907 into coast and field artillery branches, there came a reorganization of the Artillery School under the name of

'The Coast Artillery School.' The Department of Enlisted Specialists grew to three courses that year, and a master gunner was assigned to the school as an assistant instructor.⁴⁵

Perhaps out of frustration with the slow progress of the electrician sergeants' division at Fort Totten, but more likely, in preparation for a successor to that program, the Coast Artillery School began its own program in 1907. To the Department for Enlisted Specialists, with its courses for artillery specialists (master gunners), was now added instruction for electrical specialists (electrician sergeants). The course emphasized fundamental principles of electrical knowledge and their application. Candidates were examined in arithmetic; algebra, to include simple exercises (not problems) and the solution of equations of the first degree containing two unknown quantities; elementary steam engineering; elementary electricity and its practical applications; and elementary power transmission. A third course, for mechanical specialists (firemen), with similar requirements, was also added. All three courses opened on October 1, 1908, with a total of fifty men.⁴⁶

The enrollment for the artillery specialist course was ten students, two sergeants, two corporals, and six privates. The mechanical specialists' course contained five electrician sergeants, one first class private and

four second class privates. The electrical specialists' courses contained a total of thirty students: fourteen sergeants, three corporals, five firemen, one mechanic, two first class privates, four privates, and one recruit. All but three of these men were members of the Coast Artillery Corps; one of the sergeants and two of the first class privates in attendance were from the Signal Corps by special orders of the War Department. Twenty-seven of the thirty successfully completed the course in August of 1909.⁴⁷

5. Consolidation

It was no secret the artillery officers had long cherished the dream of consolidating the two coast defense schools into one institution at Fort Monroe. In the early months of 1908, it became general knowledge that a plan of consolidation had been approved and that money had been appropriated for such a modern facility and that it would open in August. In March of 1908, the long-desired general order abolishing the School of Submarine Defense was issued by the War Department. The classes in attendance at the school were given until the first of August to finish their instruction, at which time, "the Fort Totten School will have passed out of existence forever," a journalist noted,

"and in its place, on the Virginia shore, will have arisen what is to be the greatest institution in the world for the training of officers and men in coast defense warfare."⁴⁸ In order to mitigate the concern of New Yorkers over the reduction of the officer and enlisted population as a result of the loss of the school, the War Department hastened to say that closing the school would not mean that the strength of the fort would be diminished. "We have had the two schools placed under the general supervision of the Coast Artillery School," Brigadier General Murray informed the press, "for the reason that their work is interdependent, and much better results can be attained through their merger."⁴⁹

A board was appointed by Major General Bell, the Chief of General Staff, to go to Fort Totten for the purpose of conducting an inventory of all property at the School of Submarine Defense. Everything that could be shipped was to be designed for removal to Fort Monroe. All else was to be disposed of at auction.⁵⁰

During the summer of 1908, there occurred three mundane yet historically significant voyages from Fort Totten to Fort Monroe. On each of these missions, of eight days duration each, twelve enlisted men from Fort Monroe were placed on detached service aboard the mine planter 'Major Samuel Ringgold.' From the fourteenth until the twenty-second of August, the planter transferred

materials from the School of Submarine Defense to the Coast Artillery School in accordance with instructions from the Adjutant General's Office.⁵¹ When the 'Ringgold' unloaded its final cargo at Fort Monroe on the morning of August 22nd, the last connection between the two forts was severed.

Colonel Tidball's dictum of twenty-six years past, concerning the proprietary right of the artillerymen and their school to submarine weapons, was now a reality: "The use of these machines in war will naturally fall to the artillery branch of the service," Tidball had predicted in 1882. "Thorough practical instruction therein should therefore be given...and the Artillery School is the proper place for it."⁵²

SCHOOL CALL

By 1891, a bugle playing the thirteen bars of 'school call' had become a familiar, if not universally welcomed, sound to the soldiers garrisoned throughout the United States.¹

The army is not a mirror of society at large. Yet surprisingly, there was in the army, prior to the Great War, a confluence of those formal and informal educational institutions then helping to transform and modernize the moral and intellectual education and values of civil society. Lawrence A. Cremin has identified these institutions as inclusive of the household, the church, both general and vocational schools, popularized higher education, the work place, rehabilitative and custodial institutions, libraries, and mass media.² Cremin included the army with this list only after the introduction of conscription during the Great War, overlooking the profound influence this institution held for the immigrant and native-born populations before the war.

Be that as it may, his assessment of educational institutions is important to this study of the army. The post schools for enlisted men and their children, the post chapels, Sunday schools and libraries, the post libraries and reading rooms, the Noncommissioned Officers' Schools or the so-called 'captains' schools,' the service schools, the various military journals, even the prison at Fort

Leavenworth, all of these educational elements had their counterparts in civil society. A study of education in the army before the Great War also addresses an interesting query made by David B. Tyack; why did communities all across the nation create schools that were roughly similar? Tyack characterizes the development of nineteenth-century civilian common schools as the largest instance of decentralized institution-building in American history."³

While Cremin's view is consistent with Tyack's, he fails to see the decentralized nature of army education before the Great War. If this study suggests nothing else, it is that the various elements of army education before the Great War were, as was the case in civil society, decidedly local in nature and institutionally decentralized.

Indeed, one inescapable conclusion of this study of the origins of education for the noncommissioned officers and selected privates of the army is the profound effect made upon that education by the common school movement in civil society. For in the first instance, the education of these men was made, or failed to be made, in their district common schools. A second conclusion is the reciprocal influence of the military and its systems of education on the civilian schoolmen. A mutual exchange of ideas and experience grew between the military and civilian educationists. The debate within each sector as to the

merits of the other was often highly critical and heated. And as mutual influences developed, they only tended to reinforce such mutual ties and commonalities as already existed.

Neither should the influence of the Civil War on both soldiers and civilians be underestimated. The net result of the national military experience of the Civil War would be greater specialization in the professions, the eclipse of philanthropy by 'scientific' social welfare planning, and a supplementation of local school boards by superintendents of other school administrators. Former war correspondent and volunteer officer William Conant Church, for example, used his periodical, the Army and Navy Journal, to encourage civil service reformers to emulate the army by adopting its relatively meritocratic promotion policies, and to depolitice. The civil service reform movement itself "suggested the ideal of military professionalism...."⁴

Civilian education was among the many areas of civil life to become greatly influenced by the military. Civilians, especially those with wartime experience, espoused an 'army system' of bureaucracy and staff organization. In Education, such schoolmen as 'Colonel' Francis W. Parker and 'General' John Eaton were only the most visible ex-soldiers in the postwar common school movement.⁵ Along with them was a generation of men and

women from the middling ranks of society who had served in one capacity or another in the war effort.

During the Civil War, schoolmaster and college professors had led off by enlisting or moving into war-related industries. The University of Michigan provided several companies of alumni and students to the Union army, Oberlin College sent a company under the captaincy of one of the Latin tutors. Company 'E' of the 44th Regiment, New York Volunteer Infantry, was composed largely of students and graduates of the State Normal School, at Albany, New York. Officered, quite appropriately, by their former professors, the so-called 'Normal School Company' served from 1862 until 1864, and fought in many engagements, Antietam and Gettysburg, among them.⁶

Indeed, from the Civil War until the turn of the century, civilian and military educationists called for the addition of the martial virtues to those of the common schools. A generation of young men of the middle classes had been exposed by the war to the 'strenuous life.' War and life were conceptually one for these young men. First Sergeant Consider Heath Willet of the 'Normal School Company' closed a letter to his old professor at Albany, during a lull in the battle of Fredricksburg, thus: "I remain as true and firm in battle, as I hope to be in the battle of life."⁷

Although a minority viewpoint, the introduction of

military training, drill and gymnastics to the curriculum of the common schools was a theme throughout this period, building to a crescendo in the mid-1890s. The notion experienced a strong impulse when ex-president Harrison called for such instruction. General Schofield, the commanding general, threw his weight solidly behind the proposition through a neat piece of logic; if universal education was indispensable to universal suffrage, and if the most serious questions upon which a free people can be called to vote are "war, preparedness, approval or support, disapproval and condemnation of the execution of war," therefore, universal military education was requisite to the performance of this highest civic duty of the citizen.⁸

In 1895 a bill was successfully introduced in the House of Representatives, by Mr. Curtis of New York, which would have authorized the detail of regular army officers on detached service as instructors at public schools.⁹ That same month, the New York Senate State reported the defeat of a bill that would have provided and encouraged military instruction in the public schools with an appropriation of one hundred thousand dollars. Among the protests registered against the proposed legislation were those of such social critics as Felix Adler, William Dean Howells, Josephine Shaw Lowell, and Henry George.¹⁰

Although this call to militarism was repugnant to the

majority of civilian educationists, the strength of the militants' appeal was an indication of the influence of the war and the military life on the schoolmen. As in the case of conscription and state-sponsored, compulsory schools, educators could but admire such European policies from afar. Their implementation in republican America proved untimely, at best.¹¹ Yet had they been successful, the influence of such training in the common schools would have changed the complexion of the noncommissioned officer corps of the army entirely. Graduates of the common schools might have gone directly into the army as corporals and sergeants, or at least formed the pool from which the noncommissioned officers would have been chosen, unless excused from service as was the case in France and Germany.

And yet the growth of bureaucracy in the public schools would also be, to some extent, an outcome of the military experience of the schoolmen during the Civil War "with the realities of large-scale organization...on a scale with few precedents in civilian life."¹² Indeed, the modern public schools that had become so well-established by the 1880s would lend themselves to a military description. The jargon of the soldier has even been applied to the public schools of the present generation, if more often than not, in a pejorative sense. For instance, Michael B. Katz has likened schools to "fortresses in function as well as form, protected outposts

of the city's educational establishment and prosperous citizens who sustain it." In these 'frontier' garrisons the children are drilled in a regimen that will make them "orderly, industrious, lawabiding, and respectful of authority."¹³ Their unionized drill sergeants have become, it might be argued, the noncommissioned officers of education.

This vision of the transformation of the traditional one-room schoolhouse into the modern supervised and regulated classroom is not simply that of radical criticism. It was a traumatic change discernable to the teachers of that era. The following 'open letter' to the editor of the Century Magazine in 1889 from William J. Desmond of Milwaukee, Wisconsin, expressed the perceived influence of the 'army system' on education.

Thirty years ago the leaders of thought in the teaching profession worked in school-rooms. Today they work in offices. The army idea has been adopted in the organization of educational work. The class teacher has lost his sovereignty and is become a private in a great army ruled by 'educators.' We witness a multiplication of positions filled by men who direct and supervise the work of teaching, but who do no teaching themselves. These educators have absorbed the executive functions of the school committee of old, and too often the thinking functions of the teacher. The class teacher is given a course of study docked on all sides, with methods of teaching every subject, and a boss educator is on hand at intervals to see that all mere class teachers keep in line.

Two evils result from this condition.

Teachers in large cities, having the matter and method of their work thought out and prescribed for them, are ceasing to be thinkers in a professional way. One boss may do the thinking for a hundred house builders, but builders of brains should do their own thinking. Recognition of efficiency in class teaching now comes in the form of an invitation to stop teaching a class, to step out of the school-room, to become a dispensator of educational enthusiasm, a formulator of pretty theories, a thinker for other workers. The highest price paid for school supervision is paid in the annual drawing off of good class teachers to go into the 'educator' business. The influence of one superior class teacher through his or her class work is more effective for good than the platitudes and reports of a dozen educators.¹⁴

At least until the present, promotion from the ranks of the educational army has been the rule. Desmond's letter was not without response, however, and that letter too used military phraseology. L. P. Nash of Hingham, Massachusetts, retorted that "the great educational army of this country [would] degenerate into a mere headless mob" if deprived of its leadership. In spinning rooms, bands, and the court room, those who excel at their given work rise to the position of supervision and authority, he reasoned. And as supervisors hold office until they die, "being likewise mightily encouraged unto long life," successors are infrequently chosen. "Are the ranks in immediate danger of being depleted?" asked Nash rhetorically.¹⁵ And as had happened in Europe, the unintended product of these educational armies would be a

seemingly unlimited supply of literate soldiers in two world wars.

To an interesting extent, movement toward a professional noncommissioned officer corps in the United States Army was both republican and Republican. And to a remarkable degree did the army educationists share similar characteristics with their civilian counterparts. Within the army, however, they were atypical, being humorless, sober and morally righteous. Quite unlike their brother officers, the army educationists were neither gamblers nor hard drinkers, while profanities never passed their lips. They were Protestant Christians, often of an evangelical turn, and like the civilian schoolmen, they "shared a common Victorian culture," shapers of opinion concerning a social "movement comparable in many way to the astonishingly rapid growth of the Baptist and Methodist churches."¹⁶

Politically, the army educationists were committed Republicans; Allensworth, Garfield, Howard, McCray, Proctor, Schofield, and Schenck, to mention but a few of the most prominent. After his discharge, John J. Lenny, post school teacher, quartermaster sergeant, and frustrated aspirant for a commission, would thoroughly research the history of promotions from the ranks in the United States Army. Among his conclusions was that the "Republican Party and Republican Congresses and administrators have always

been alert on behalf of Promotion from the Ranks...."¹⁷ It is worth remembering how Harrison's 'Magna Charta' for the enlisted men of the army placed O. O. Howard in such consternation. Lenny attributed the indifference of the Democratic Party to "the attitude of [its] Southern wing...due to the Cavalier tradition plus caste elements in slavery itself and to John C. Calhoun and his unwholesome, destructive influence and principles."¹⁸

Almost to a man, the army educationists were products of the common schools themselves. They also attended the common schools where those institutions were strongest, in the rural and small-town America of the North and the West.¹⁹ Many of them had taught in the common schools. The virtues and values of the common schools were a part of the very assumptions they brought to the reforming role they undertook. And to a large extent, the work of the army educationists placed them within the common school movement; the adult education established in the army was often an attempt to inculcate the rudiments of a common school education in a constituency which was served by the weakest of the common schools: immigrants and the urban poor. The age of the students was the only difference.

Combined with the political motivations of the reformers was a strong evangelical background. While Upton, Garfield, and Schofield were prominent Bible men, Howard was, indeed, a 'Bible chief.' And in the small

nineteenth-century army, they were close associates, intimately acquainted and mutually influential. As was the case of the civilian schoolmen, their evangelical Protestant religious persuasion served to reinforce their strong Republican political identity. For by the second half of the nineteenth century, the Bible had become well established as an American "patriotic symbol of the first order."²⁰

It may be worth consideration that the public school systems of the United States have traditionally failed to educate a significant number of their clients. Any attempt to provide adult general and technical education for the members of that group might benefit by the experience of the post schools, captains' schools, and service schools of the post-Civil War era. These lessons need not be learned again through trial and error. As the traditional schools of last resort for the failures of the public schools, the army schools for noncommissioned officers and selected privates have earned an honest niche in the history of American education. The soldiers who have completed such courses of instruction have proven themselves competent middle managers, small unit leaders, and technical specialists. One might wonder what would have been their lot had they remained in civil society, dependent upon what feeble education they had derived from the common schools.

Unlike the grand architecture of the civilian common

schools, little remains of those early attempts at the education of soldiers, made under clapboard and canvas and with well-worn materials. For as the civilian educationists of the common school era defined their mission in terms of the heroic, the military educationists muddled on in the reality of the mundane. They were not trying to save society; they were simply attempting to educate their soldiers.

NOTES

Abbreviations

Heitman	Francis B. Heitman, <u>Historical Register and Dictionary of the United States Army from its Organization, September 29, 1779 to March 2, 1903</u> . 2 vols. (Washington: Government Printing Office, 1903), vol. I
GPO	Government Printing Office
RG	Record Group
JMSIUS	<u>Journal of the Military Service Institution of the United States</u>
NA	National Archives
USMA	United States Military Academy Library

INTRODUCTION

1. Lenore O'Boyle, "A Possible Model for the Study of Nineteenth-Century Secondary Education in Europe," Journal of Social History, XII, 2 (Winter 1978), 236.
2. Bruce White, "ABC's for the American Enlisted Man: The Army Post School System, 1866-1898," History of Education Quarterly, VIII, (Winter 1968), 479-496.
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4. O'Boyle, "A Possible Model," 236.
5. Ibid., 237.

CHAPTER I. NONCOMMISSIONED OFFICERS AND REFORM

1. In just one year, 1871, some 8,800 men, one-third of the army, deserted. The number fell during the depression years of the seventies, only to rise again in 1882. Russell F. Weigley, History of the United States Army (New York: Macmillan, 1967), p. 270.
2. Charles Knowles Bolton, The Private Soldier Under Washington (Port Washington, N.Y.: Kennikat Press, 1964), p. 135. "The spirit of resigning commissions has long been at an alarming height, and increasing daily," wrote

Washington in April of 1778. "The Virginia line has sustained a violent shock in this instance. Not less than ninety have already resigned to me. The same conduct has prevailed among the officers from the other states, though not yet to so considerable a degree; and there are but too just grounds to fear, that it will shake the very existence of the army, unless a remedy is soon, very soon, applied."

Emory Upton, The Military Policy of the United States (Washington: GPO, 1917), p. 37.

3. Bolton, The Private Soldier Under Washington, pp. 137-140; Larry Gragg, "Mutiny in Washington's Army," American History Magazine, XI (October 1976), 36-38.

4. Adolphus W. Greely, Reminiscences of Adventure and Service A Record of Sixty-Five Years (New York: Scribners, 1927), p. 53.

5. Augustus Meyers, Ten Years in the Ranks of United States Army (New York: Arno Press, 1979), p. 129; Diary of 2nd Lt. William Abbot, Co. K, 9th United States Infantry Regiment, Camp Sheridan, Nebraska, entries for October 4, 5, 1874, February 16, 17, 19, May 11, 19, July 30, September 7, 1875, and January 25, 1876, USMA.

6. Myers, Ten Years, p. 165.

7. August V. Kautz, Customs of Service for Non-Commissioned Officers and Soldiers (Philadelphia: J. B. Lippincott & Co., 1864), p. 132. Another reason for the need of a first sergeant was the growing amount of paper work demanded by the army of companies. The first sergeant needed to be a highly literate soldier. Hugh L. Scott, Some Memories of a Soldier (New York: The Century Co., 1928), p. 169.

8. Meyers, Ten Years pp. 177-178; Upton, Military Policy, p. 184.

9. John M. Schofield, Forty-Six Years in the Army (New York: The Century, Co., 1897), p. 18.

10. Meyers, Ten Years, pp. 177-178; Upton, Military Policy, p. 184; United States Statutes at Large, V, 260.

11. Detachment to such mundane duty as the recruiting service did not even seem to merit any forethought or concern as to the importance of the position or duty of the officer being considered. In 1866, while trying to construct Fort Philip Kearny and defend against Indian attacks, Col. Henry B. Carrington received peremptory orders from Washington to send two of his officers on recruitnig service. This was shortly before the infamous Fetterman massacre in which a major element of his command was completely destroyed, an event unequaled until the Custer massacre in 1876. In his appeal to the Adjutant General in Washington, Carrington protested the detachment of his officers and added: "I have to give sergeants important duties, having for a line of one hundred miles

active Indian hostilities. Lieutenant Daniels, en route to join me with escort of fifteen men, was scalped and horribly mutilated...." Dee Brown, Fort Phil Kearny: An American Saga (New York: G.P. Putnam's Sons, 1962), p. 94. For another example see: Diary of 2nd Lt. William Abbot, Co. K, 9th United States Infantry, Camp Sheridan, Nebraska, entry for September 18, 1874, USMA.

12. C. Robert Kemble, The Image of the Army Officer in America: Background for Current Views (Westport, Conn.: Greenwood, 1973), p. 136.

13. Lt. Henry Remeyn, "Military Education in Schools and Colleges," The United Service, II (April 1880), 405, Romeyn had risen through the ranks, having served as a private, corporal and sergeant from August 15, 1862 until November 15, 1863 with the 105th Illinois Volunteer Infantry. Heitman, 884.

14. James Richardson, comp., A Compilation of the Messages and Papers of the Presidents 1789-1897 (Washington: GPO, 1896-1899), X, 4570. Little heed was taken of this suggestion. By 1888 there were 50 army officers detailed as instructors at colleges. Leonard L. Lerwill, The Personnel Replacement System in the United States Army (Washington: GPO, 1954), p. 138.

15. William B. Hazen, The School and the Army in Germany and France (New York: Harper & Brothers, 1872), p. 227.

16. Jack D. Foner, The United States Soldier Between Two Wars: Army Life and Reforms, 1865-1898 (New York: Humanities Press, 1970), pp. 63-64; O.O. Howard to Col. J. M. Carson, January 7, 1885, Howard Papers, Bowdoin College.

17. Robert M. Utley, Life in Custer's Cavalry: Diaries and Letters of Albert and Jennie Barnitz, 1867-1868 (New Haven: Yale Univ. Press, 1977), p. 203; Emory Upton, Armies of Europe and Asia (New York: D. Appleton and Co., 1878), p. 35. Peter D. Skirbunt, "Prologue to Reform: The 'Germanization' of the United States Army, 1865-1898" (Ph.D. diss., The Ohio State Univ., 1983), p. 67.

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23. C., "Detached Service," The United Service, XIII (May 1895), 402.
24. Elihu Root, The Military and Colonial Policy of the United States (Cambridge: Harvard Univ. Press, 1916), p. 371; Annual Report of the Chief of Artillery, 1903.
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41. Neil Baird Thompson, "Discipline and Morale of the United States Army Troops in the Division of the Missouri, 1866-1876" (M.A. thesis, Kansas State College of Agriculture and Applied Science, Manhattan, Kansas, 1948), p. 35.
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60. O.O. Howard to K.B. Cox, February 8, 1889, Howard Papers.
61. Army and Navy Journal, September 5, 1880.
62. Army and Navy Journal, March 3, 1883.
63. Woodhull, Soldier, p. 11.
64. Coffman, Old Army, p. 330; The Army and Navy Journal, November 10, 1888.

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CHAPTER II. POST LIBRARIES AND SCHOOLS

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CHAPTER III. SIMPLY AT SCHOOL; THE ARMY EDUCATIONISTS

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CHAPTER IV. THE FAILURE OF THE POST SCHOOLS

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6. Edward M. Spiers, The Army and Society: 1815-1914 (London: Longman Group Ltd., 1980), pp. 150-151.
7. The American Journal of Education, XXVIII (1872), 625; Richard Blanco, "Education Reforms for the Enlisted Man in the Army of Victorian England," History of Education Quarterly VI (Summer 1966), 66; Anglesey, British Cavalry, II, 293. The candidates studied arithmetic and mensuration, algebra, geometry, trigonometry and logarithms, industrial mechanics, English and colonial history, grammar, geography, penmanship, chemistry and physics, fortification, drawing,

singing, reading and religious knowledge. Alan Ramsey Skelley, The Victorian Army at Home (Montreal: McGill-Queen's Univ. Press, 1977), p. 122n.

8. Ibid., p. 293; The American Journal of Education, XXIII (1872), 625.

9. The most sympathetic comment concerning the schoolmaster may have come from Sidney Herbert when he remarked that the schoolmaster was "neither fish, flesh, nor fowl." Blanco, "Education Reforms of the Enlisted Man," 67. Suspicion of the schoolmaster as an agent of subversion was voiced by the Duke of Wellington: "By Jove!," he is reported to have exclaimed, "if there is a mutiny in the army - and in all probability we shall see one - you'll see that these new fangled schoolmasters are at the bottom of it." Skelley, Victorian Army, pp. 113-114.

10. Anglesey, British Cavalry, II, 290 and 292. The Duke of Newcastle's Commission studies the soldiers' schools as well as those civilian. The report stressed the need for soldiers "to be intelligent and to exercise self-reliance," and furthermore that mastery of the rudiments of education was the means to that end. Blanco, "Education," 69.

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12. General Order 10 April 1849; Horse Guards Circular, 18 May 1849; Strachan, "Early Victorian Army," 804.

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14. 32nd Article of War, 1858; Anglesey, British Cavalry, II, 288-289.

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17. Skelley, Victorian Army, p. 96.

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20. JMSIUS, XIII (1892), I, 191; Foner, Soldier, p. 27.

21. Herbert M. Hart, Old Forts of the Southwest (Seattle: Superior Publishing Co., 1964), p. 181; Don Rickey, Jr., Forty Miles a Day on Beans and Hay (Norman: Univ. of Oklahoma Press, 1963), p. 111; Bruce White, "ABC's for the American Enlisted Man: The Army Post School System, 1866-1898," History of Education Quarterly, VIII (Winter 1968), 285; Earl F. Stover, Up From Handymen: The United States Chaplaincy, 1865-1920 (Washington: GPO, 1977), p. 48.

22. A.A. Woodhull, The Enlisted Soldier (Washington: GPO, 1890), p. 30.

23. Lt. John A. Lockwood, "The Intellectual Improvement

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24. Report of the Adjutant General, 1885, I. 74.
25. Ibid. p. 21, 74; A History of the Watervliet Arsenal 1813-1968 (Watervliet, New York: Watervliet Arsenal, 1969), p. 72; JMSIUS, XII (1891), 1182, XIII (1892), 524.
26. Lt. Alfred C. Sharpe, "Post Schools," JMSIUS, XII (1891), 1185-1187; Maj. William Henry Powell, "Education in the Army," The United Service, VI (December 1891), 540; David Nasaw, Schooled to Order: A Social History of Public Schooling in the United States (New York: Oxford Univ. Press, 1979), p. 63. Another benefit thought to be derived from such professionally prepared teachers would be their ability to teach both children and adults, soldier-teachers having proven themselves quite hopeless in dealing with the former variety of student. Martha Summerhayes, Vanished Arizona: Recollections of My Army Life (Philadelphia: Press of J.B. Lippincott Co., 1903), p. 284.
27. New York Times, February 21, 1892.
28. Rickey, Forty Miles, p. 110.
29. Register of Post Quartermaster Sergeants, 1886, p. 65, RG 94, NA; James A. Egan to O.O. Howard, May 14, 1892. Howard Papers.
30. Annual Report of the Secretary of War, 1880, I, 297; New York Tribune, November 15, 1880.
31. The United Service, IV (April 1881), 516: 47th Cong., 1st Sess., House Report No. 1425, p. 320.
32. Annual Report of the Secretary of War, 1882, I, 191; Burke A. Hinsdale, President Garfield and Education (Boston: James R. Osgood & Co., 1882), pp. 172-173; White, "ABC's, p. 486.
33. The United Service, VII (November 1882), 516.
34. Ibid., 511; White, "ABC's," 486-487.
35. Heitman, 384; The National Cyclopaedia, XII, 359.
36. Annual Report of the Secretary of War, 1882, I, 28-29.
37. Annual Report of the Secretary of War, 1883, I, 56.
38. 58th Cong., 3rd Sess., House Document No. 2, pp. 174-175.
39. New York Times, February 21, 1892.
40. 58th Cong., 3rd Sess., House Document No. 2.
41. The United Service, X (October 1893), 341.
42. Albert F. Gleim, "The Certificate of Merit: United States Army Gallantry Award, 1847-1918," (Unpublished monograph, 1979), p. 15; Regulations of the Army of the United States, (1904), par. 169; 58th Cong., 3rd Sess., House Document No. 2, III, 19.
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50. Col Wesley Merritt, "Some Defects of Our Cavalry System," The United Service, I (October 1879), 559. A curious example of promotion by merit began in 1872 when Congress authorized the annual appointment to the grade of second lieutenant of one weather observer sergeant in the Signal Corps. "Selected for distinguished fidelity and ability," the honor was limited by the stipulation forbidding the further promotion of officers so appointed. Historical Sketch of the Signal Corps, (Fort Monmouth, 1929), p. 29.
51. 42nd Cong., 3rd Sess., House Report No. 74, p. 72.
52. 45th Cong., 2nd Sess., House Miscellaneous Document No. 56, IX, Sec. 26; Donna Marie Eleanor Thomas, "Army Reform in America; The Crucial Years, 1876-1881." (Ph.D. diss., Univ. of Florida, 1980), p. 238.
53. Lenny, Rankers, p. 3; General Orders No. 62, War Department, Adjutant General's Office, August 26, 1878; Thomas, "Army Reform," p. 130; Circular No. 11, War Department, Adjutant General's Office, December 31, 1889. Gen. Sherman's recommendations are cited in James A. Garfield, "The Army of the United States," North American Review, CXXVI (March 1878), 208-209; Andrews, "Frustration," p. 197.
54. Ibid.
55. New York Times, January 29, 1889.
56. New York Times, November 2, 1889.
57. Foner, Soldier, p. 112.
58. Maj. George W. Baird, "Army or School." The United Service, X (October 1893), 308.
59. Ibid.; Heitman, 183.
60. "K," Letter to the Editor, New York Times, March 13, 1893.
61. Maj. George W. Baird, "Recent Army Legislation," The United Service, X (December 1893), 504.
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63. Rickey, Forty Miles, p. 63.
64. O.O. Howard to D.H.A. Moore, April 1, 1882, Howard Papers.
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66. The United Service, VI (December 1891), 541-542;
67. O.O. Howard to J.R. Hawley, April 10, 1890, Howard Papers.
68. O.O. Howard to J.R. Hawley, April 10, 1890, Howard Papers. If orthography offers any measure of educational background, Guy Howard's barely legible scrawl gives some credence to his father's theory. His right-handed father, whose right arm was amputated during the war, could write a better hand with his remaining hand than could his son with his good hand.
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