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First Draft

History 300W

Prof. Randaccio

Beginning with the American Revolution, the United States Army Corps of Engineers has had a long and distinguished career. In the modern army, there are thousands of highly trained engineer soldiers who play an important role in various aspects of war. Burdened with the tasks of mobility, counter-mobility, sustainment, survivability and topographic engineering, in addition to the requirements of having to fight as a combat soldier, engineers have played crucial role in every major American war.<sup>1</sup>

Despite the critical nature of having military engineering as a part our military, the engineers of America's first two wars went largely overlooked. These troops were commonly infantrymen under the command of a single Engineer Officer assigned to an entire army. This had been the way of the Europeans for centuries. However, with the coming of the first Industrial Revolution and the wave of increasingly deadly weaponry it produced, it became apparent to the powers of Europe that larger bodies of trained non-commissioned officers and private engineer soldiers were required to fight a modern war. While most American politicians paid little attention to these changes, Chief Engineer of the Army Colonel Joseph G. Totten did.<sup>2</sup>

Totten was an early West Point graduate and had gained fame as Winfield Scott's Chief of Engineers during the War of 1812. He proposed that a company of one hundred enlisted engineer soldiers be mustered in to supplement the existing officer corps. They would function as the first permanent engineer unit. He proposed that these soldiers be trained at West Point in the latest schools of engineering and infantry by an Engineer

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<sup>1</sup> Riese, Stephen, *"Company A, Corps of Engineers, In the Mexican War"* (M.S. Thesis, U.S. Army Command and General Staff College, 1995) (8-9)

<sup>2</sup> Riese, (10)

Officer and that they should become a part of America's peacetime army. This unit would serve as regular Engineer troops if the country found itself at war. During times of peace they would be responsible for training the cadets at West Point. However, the United States government paid little attention to Totten's idea. The majority of Americans believed in having a small peacetime army and expansion was not a suitable idea in Washington. Totten's request went unfulfilled for several years.<sup>3</sup>

During that time, tensions over the United States boundaries with Mexico grew. In 1845, the US annexed the Texas Republic, all formerly Mexican land. Tensions continued to grow until early 1846, when a small band of Mexican Regulars crossed the Rio Grande into Texas and killed, wounded or captured all the members of a squadron of United States Dragoons. Upon hearing news of this, the United States declared war. On May 15, 1846, Congress authorized legislation to bring to life Colonel Totten's dream of having a unit of enlisted engineer troops. The legislation that passed this was one among many pieces passed by Congress at the beginning of the Mexican-American War, along with a significant amount authorizing volunteer troops to fight along side of regular soldiers. Dubbed "Company A, U.S. Corps of Engineers", the unit's action on and off the battlefield would make them one of the key units in both General Taylor's and General Scott's campaigns in Mexico from 1846 through 1848.<sup>4</sup>

Prior to 1846, the Corps of Engineers had only officers to lead the United States in the field of military engineering. Commonly there were foreign experts among them as there were simply too few US personnel for the job. The unit of American engineer

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<sup>3</sup> Riese, (18-22)

<sup>4</sup> Nichols, Edward J. *Zach Taylor's Little Army*. New York: Doubleday & Company, Inc., 1963

troops formed through Totten's foresight would develop into a critical force during the War with Mexico. General Winfield Scott, whose brilliant military career spanned over fifty years, commented, "that but for our graduated cadets [from West Point] the war between the United States and Mexico might, and probably would, have lasted some four or five years"<sup>5</sup>. That was over twice the amount of time that it actually took for the U.S. to drive the numerically superior Mexican army into submission.

To understand their importance, a little background knowledge about Company A must be known. The unit was unique in several ways. Most apparently, in addition to their muskets their "armory" consisted largely of tools such as pick axes, shovels and saws. Furthermore, Company A was recruited of almost exclusively American born men. Engineer soldiers were required to be of larger physical size 5'6" rather than 5'5" required of a common soldier. A height of 5'8" to 5' 10" was preferred. Recruiter's attention was to be given to men holding a skilled mechanical trade as well. Engineer recruits were also required to know how to read and write English. This is peculiar at a time when nearly half of the standing army consisted of men that were of foreign birth and who were largely unskilled. It was felt that because the engineer noncommissioned officers and private soldiers were to often be put in charge of parties of infantry or artillery troops, they would need to be able to give and receive written orders, as well as communicate effectively with the troops they commanded.<sup>6</sup>

Company A's first commander, selected by Colonel Totten, was Captain Alexander J. Swift. Swift had graduated first in his class in 1820 and had since studied at

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<sup>5</sup> Riese, (27)

<sup>6</sup> Smith, Gustavus Woodson. *Company "A" Corps of Engineers. U.S.A., 1846-1848, in the Mexican War*. Ohio: Kent State University Press, 2001. (26)

the L'Ecole Polytechnique, France's premier school for military engineers. His first task would be to recruit men for his new company. Despite the incentive of higher pay, the high qualifying standards for the company made recruiting difficult. Only seventy-two of the one hundred possible positions were filled by the time Company A was deployed to Mexico.<sup>7</sup>

In addition to enlisted men, Captain Swift also needed to find two lieutenants for the company. His first choice was West Point Assistant Professor of Engineering, Gustavus Woodson Smith. Smith went on to select the other lieutenant for the company by choosing a promising ex-student of his, George Brinton McClellan. McClellan ranked second in his class of 1846. The two had become close while at West Point and both Smith and Swift found McClellan to be a suitable junior officer.<sup>8</sup>

With the officers and men of the company joined together at West Point, the infantry and engineering drill began. Swift made an excellent engineering instructor. However, the infantry drill used by the army had changed since his time as a cadet. He continued to teach the men, almost all of whom new to soldiering, in the field of military engineering while he relied on Lieutenants Smith and McClellan, both more recent graduates, to instruct the men of Company A in matters pertaining to infantry drill.<sup>9</sup>

With Smith and McClellan doing most of the training, Captain Swift set out to get the proper tools that the company would need in Mexico. Though the company consisted of a mere seventy-two men at full strength, Swift was able to supply tools enough to equip some two hundred men. It must be remembered here that the Engineers would

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<sup>7</sup> Smith, (27-32)

<sup>8</sup> Smith, (15)

<sup>9</sup> Riese, (46)

often be in a supervisory role, overseeing a number of infantrymen or artillerymen. Swift was also able to allocate funds for a rubber pontoon bridge. Though they took it to Mexico, there is no evidence of it ever being used.

A mere four months after being authorized, Company A was prepared for war. Captain Swift received orders to move the company, consisting of seventy-two enlisted men and three officers, to Mexico by way of New York City on September 12, 1846.

Company A arrived at Brazos Santiago, Texas on October 12, 1846. On October 17, Company A crossed the Rio Grande into Mexico to Camargo, approximately one hundred miles away. Camargo was a staging point used by General Zachary Taylor in his upcoming campaign in through northern Mexico. Waiting again at Camargo, the Engineer Company resumed infantry and engineer drill and every soldier, with the exception of the company cook, achieved a high competency of drill.<sup>10</sup>

During their time at Camargo, the focus of the war shifted from General Taylor's northern campaign at the Texas border to General Winfield Scott's campaign in the south.<sup>11</sup> The company sailed back to Brazos and then marched to Matamoros, where they were to become part of General Patterson's division. Though they had yet to see the enemy, disease had claimed the lives of five of Company A's soldiers. When they left Matamoros on December 21, they left behind nearly a third of their men in hospitals. Among these men was Captain Swift.<sup>12</sup>

The company arrived at Tampico by way of Victoria. The march was labor intensive as many of the roads were impassible for artillery and wagon trains. Numerous

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<sup>10</sup> Smith (10-17)

<sup>11</sup> Nichols, Edward J. *Zach Taylor's Little Army*. New York: Doubleday & Company, Inc., 1963

<sup>12</sup> Smith (20)

bridges were built and fords dug so that the infantry column could move at its usual pace. Most of the physical work was done by details of Patterson's infantrymen under the direction of the men of Company A. Because Captain Swift had been so fortunate as to equip his unit with significantly more tools than he had men, as many as two hundred infantrymen were detailed to work with the Engineers at any given time.

Along the way between Matamoros and Victoria occurred what became known as the "corn-shucking match". Major George McAll, of Patterson's staff, rode ahead of the working parties to see what lay ahead. McAll found that, approximately one mile ahead of the American forces was a branch of the Soto la Marina River. It presented one of the most difficult tasks yet to be asked of Smith, now in command due to Swift's illness, and his Engineers. The river had one hundred foot high banks and a soft bottom, both of which make fording exceedingly difficult if not impossible. According to Lieutenant Smith, "It looked ugly."<sup>13</sup>

McAll estimated it would take two days to cross the river. Lieutenant Smith estimated up to three days. A detail was requested for eight hundred men and though it was the largest detail yet requested, the crossing was crucial and the labor detail granted. Smith analyzed the situation and split the men up into seven groups, three on each bank and one in reserve. Each group would be asked to give only a single hour's hard work in a rotation with the others.<sup>14</sup>

With Smith commanding the far bank and McClellan commanding the near, the entire job was completed in a mere three hours. Smith had asked that, for the single hour of each rotation they worked, each man work like he was in a "corn-shucking match".

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<sup>13</sup> Smith, (22)

<sup>14</sup> Smith, (28-32)

That is, he would work as hard and fast as possible for an hour and then be relieved by the next work party. The ensuing frenzy angered infantry commanders, as the melee caused soldiers from the working parties to be so intermixed that it would take several days to return them all to their respective units. However, Smith's planning and the detail's hard work accomplished in several hours what was expected to take several days. This event would be the first of many where the Engineers would far exceed the expectations placed upon them. They would continue to play a pivotal role in the Army's advance.<sup>15</sup>

On January 4, 1847, Company A arrived in Victoria and was reassigned from Patterson's division to that of Major General David E. Twiggs. Twiggs had been ordered to advance on Tampico. Knowing that the roadwork ahead was going to be difficult, Twiggs sent two companies of infantry, 200 soldiers in all, to be Company A's workforce. This permanent "Pioneer Party" as it became known, helped the Engineer Company work more efficiently. The company commanders no longer needed to request a separate detail of workers every time labor was needed and the infantrymen improved their techniques of road repair by practicing them on a daily basis. According to Smith, during this period, "A great deal of work had been done by the details of volunteers and the Engineer Company in making the road practicable for artillery and baggage trains"<sup>16</sup>.

The company remained at Tampico for a little over a month before sailing for the Mexican stronghold at Vera Cruz where General Scott's campaign was to begin. Simultaneously, troops from Taylor's force consolidated on the Isle of Lobos, where they would stage their assault on Vera Cruz. Once massed on the island, the army that was to

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<sup>15</sup> Riese, (74)

<sup>16</sup> Smith, (47)



invade Mexico sailed. At the final staging area, Company A was assigned to Major General William J. Worth's division of regulars. Worth's division, including Company A, would serve as the first wave in the beachhead. Just prior to the landing, a large segment of the company that had fallen ill at Matamoros rejoined the company, including Captain Swift. Swift was still in extremely poor health. Out of deep respect for Swift's service, Colonel Totten, General Scott's Chief Engineer, allowed him to accompany his men during the assault. Joining the unit was Lieutenant John G. Foster, an engineer and 1846 graduate of West Point. He became a junior officer in Company A at the last staging ground before Vera Cruz and would remain with Company A until he was gravely wounded leading an assault near Mexico City later in the war.<sup>17</sup>

The landing at Vera Cruz was to be the young Engineer Company's first combat experience. However, poor weather delayed the landings for one day. It was not until 6 P.M. March 9, 1847 that the first Americans landed on the beaches near Vera Cruz. The Mexicans resistance was minimal and an army of twelve thousand troops landed without any recorded casualties.

Among these troops were the members of Company A, once again led by Captain Swift. Swift was unable to physically lead his men ashore due to his deteriorating health and at the last moment deferred command to Smith. Without Swift's knowledge or consent, Lieutenant Smith discreetly made arrangements with the company's two largest corporals to carry Captain Swift ashore with the rest of his company. The corporals carried out Smith's orders, only to be violently resisted by Swift. Swift struck at the soldiers as they carried him from the boat to the beach. They delivered Swift to Smith

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<sup>17</sup> Riese (76-81)

who was already ashore. It was there that he learned of Smith's arrangement with the two men, to whom he apologized profusely.<sup>18</sup>

Unfortunately, Swift's condition deteriorated rapidly at Vera Cruz. After spending several hours on the beach in the sun, he lost consciousness. He was transported out on the first available ship to New Orleans but died within twenty-four hours of reaching American soil. It would be several months before men of Company A would learn of their beloved leader's death.

Operations at Vera Cruz continued with Lieutenant Smith resuming his position as commanding officer. The decision to take Vera Cruz by direct assault was abandoned as the commanders deemed it would cost too many lives. A siege plan was adopted but was not without risks as well. Yellow fever season was approaching and if Scott could not move his army out of the marshy coast before its onset, he would lose a catastrophic number of troops to disease. The decision was made to take Vera Cruz by reducing it to rubble with constant artillery fire.

Siege work was one of the major parts of the Engineer Company's job. At West Point, they had been instructed in School of the Sapper. Sapping is a technique of siege laying mastered by the French in the late 1700's. Trenches would be dug by parties of troops in a zig-zag pattern, known as saps and parallels, gradually closing in on the desired objective. As the trenches and cannon moved closer, artillery fire would become more effective.<sup>19</sup> Company A used this tactic in textbook fashion at Vera Cruz. The

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<sup>18</sup> Smith (47-49)

<sup>19</sup> Duane, James Chatham. *Manual for Engineer Troops*. New York: D. Van Nostrand, 1862. (469-471)

Engineer troops oversaw parties of infantrymen and found positions for the naval and army cannon that were to pound Vera Cruz and its garrison into submission.<sup>20</sup>

While reconnoitering the Mexican positions and searching for a proper place for an artillery emplacement, Lieutenant McClellan came across the only aqueduct that supplied the city with fresh water. He reported his findings to his superiors, who instructed him to cut the aqueduct. This was done by the men of Company A on the following day.

The Engineers continued to work on digging trenches, placing guns and repairing damage done to the trenches or gun emplacements by enemy fire. On one occasion, in a bizarre reversal of roles, the company repelled a Mexican sortie while their infantry comrades continued digging.

The lack of water and constant bombardment by the large naval cannons quickly proved to be too much for the Mexican garrison at Vera Cruz. They surrendered on March 25, less than two weeks before the siege formally began. The preparation Company A underwent at West Point and carried out so effectively had led to the capture of one of the most elaborate fortifications in the Americas. In a record amount of time, the American army was able to move away from the disease ridden shore and into the interior of Mexico. In his report on the action, Scott gave special mention to his “indefatigable engineers”<sup>21</sup>, a reference to Engineer staff officers such as Captain Robert E. Lee and Lieutenant P.T.G. Beauregard and to the men of Company A, Corps of Engineers. Without the arduous work done by these men, the siege would not have been carried out so effectively and with so little loss of American lives.

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<sup>20</sup> Riese, (82-83)

<sup>21</sup> Riese, (84)

Company A remained at Vera Cruz until April 12, 1847, when they accompanied General Headquarters into the Mexican interior. Their movements towards the plateaus of inner Mexico were, however, hindered by transportation troubles. It seems the company was forgotten by the commanders coordinating the movement. The Engineers were allotted the half the number of pack animals needed to move the their tool depot. Additionally, the National Highway, which led towards Scott's goal of Mexico City, was in poor shape.<sup>22</sup>

Due to these hardships, Smith's command traveled only eight miles in the first two days of the march. On the 16<sup>th</sup> of April, the company crossed the National Bridge. Lieutenant McClellan took time to write home about his admiration for it.<sup>23</sup> It was here that Smith received orders from General Worth that Company A would be joining him in the attack of the Mexican positions at Cerro Gordo the next day.<sup>24</sup>

Cerro Gordo translates literally to "fat mountain". The one thousand foot summit was Mexican General Antonio Lopez de Santa Anna's first choice of positions to defend. The ground to the north of the mountain was not well suited for the movement of large bodies of troops and passage was blocked on the south by large cliffs which dropped down to the Rio Del Plan. American troops would have to navigate these undesirable locations on their way to Mexico City. Knowing this, Santa Anna sought to use this ground to repel the American invasion.<sup>25</sup>

Company A marched through the night to make it to Cerro Gordo just in time for the attack. This prohibited them from doing any reconnoitering in the region beforehand.

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<sup>22</sup> Reisse, (84)

<sup>23</sup> Norman, James. *The Young Generals*. New York: G. P. Putnam's Sons, 1968. (57)

<sup>24</sup> Smith, (50)

<sup>25</sup> Brooks, N. C. *History of the Mexican War*. Grigg, Elliot & Co., 1849. (167-169)

This job was left up to staff officers Lee and Beauregard who had moved in well in advance of Company A. While scouting the area, Captain Lee found a road through the lava plains to the north of Santa Anna's position. Santa Anna had counted on the rough plains to be impassable, thereby prohibiting movement of the American army through this area. Scott capitalized on Lee's findings and moved through the maze of sharp volcanic glass and up to Santa Anna's right flank.

Simultaneously, Smith arrived on the field with Company A. He reported to Lee, now acting as General Twigg's Chief Engineer. Lee allowed the exhausted men to rest for a short while after an all night march. Once the company had rested, they were ordered to construct an artillery battery on top of La Atalaya, a smaller mountain to the north of Cerro Gordo. Drag ropes were employed by the labor party to haul several 24 pounder cannons, each weighing approximately 3,500 pounds, up the slopes of La Atalaya. The Engineers' tools were utilized by the party as they also had to cut through heavy woods which impeded their mission.<sup>26</sup>

The battery was finished and the guns were put in place during the night of April 17<sup>th</sup> and the early morning of the 18<sup>th</sup>. The company was then split into three groups under the command of Lieutenants Foster, McClellan and Smith. Smith and his men accompanied Colonel W.S. Harney's Brigade in their attack from La Atalaya to Cerro Gordo. First, Smith scouted the Mexican position and determined that its construction did not constitute an effective obstacle. He reported this to Harney, who in turn ordered

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<sup>26</sup> Riese (85-86)

Smith to form his men into line of battle. The Engineer Company readied itself for its first major combat.<sup>27</sup>

The Engineers, along with two companies of infantry, sprang from their hidden positions barely fifty yards from the Mexican lines and engaged them in hand to hand combat. The intense fighting lasted only a short time and the Mexicans were quickly routed.<sup>28</sup> American troops then moved around the northern edge of La Atalya and surrounded the routed Mexicans. In the front of the mountain, American troops overran Mexican artillery and turned their batteries' deadly force onto their previous owners. At the conclusion of the second day of fighting the Mexicans had lost one thousand men killed or wounded and another three thousand captured out of their eighteen thousand men. The American force of only eight thousand men suffered less than six hundred dead, wounded or missing.<sup>29</sup> The battle at Cerro Gordo was a stunning American victory in which the Corps of Engineers played a tremendous role, hastily building a battery after a long march, fighting in close quarters and, in McClellan's case, commanding infantry in the absence of an infantry officer.<sup>30</sup>

The American army continued to move westward towards Mexico City, Scott's ultimate goal. During this time, however, the enlistments of seven volunteer regiments ran out. Nearly one thousand men turned and marched back towards the coast and then sailed for the U.S., delaying Scott longer than he wished at the town of Puebla.<sup>31</sup> During their three-month stay at Puebla, Company A continued to drill. They also learned of

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<sup>27</sup> Smith (51-53)

<sup>28</sup> Riese (89)

<sup>29</sup> Brooks (127-130)

<sup>30</sup> Smith (54)

<sup>31</sup> Wheelan, Joseph. *Invading Mexico: America's Continental Dream and the Mexican War*. New York: Carroll and Graf, 2007. (111-112)

Captain Swift's death while they were there.<sup>32</sup> By August of 1847, new recruits had arrived which brought Scott's total strength to some fourteen thousand men. Upon reaching this strength, the army began its march on Mexico City.<sup>33</sup>

There were two paths into Mexico City from Puebla. Scott left the decision of which to take up to Lee and Major William Turnbull, Chief of Topographic Engineers. Lee and Turnbull were sent on a reconnaissance mission, from which they determined that the eastern route was more direct but heavily fortified and that the southern route was less defended but crossed much more difficult terrain.<sup>34</sup> Scott made the decision to bluff Santa Anna by sending one division under General Twiggs along the eastern route and its Mexican defenders. The other three divisions would take the longer route south, around Santa Anna's right flank.<sup>35</sup>

The engineers of Company A were ordered to take the southern route along with Scott's main force. During the march it was discovered that at key points the retreating Mexicans had blocked the roads with stone or had cut ditches across them to deny the passage of artillery and baggage trains. The engineers were detailed with the task of repairing these roads. They did so quickly and often under fire. The Mexicans often staged ambushes near the points in the road that they knew the Americans would have to repair.<sup>36</sup>

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<sup>32</sup> Smith (55)

<sup>33</sup> Brooks (133)

<sup>34</sup> Traas, Adrian George. *From the Golden Gate to Mexico City: The U.S. Army Topographical Engineers in the Mexican War*. Washington, D.C: United States Army, 1993. (46-47)

<sup>35</sup> Wheelan (143)

<sup>36</sup> Riese (88-89)

During this time Captain Lee had led an expedition around the west side of the lava fields, known as pedregals, which were causing so much aggravation for the Engineers and infantry who were advancing from the east. Lee's body of troops was met with only light resistance. Though the resistance was minimal, it proved to Lee that there must be an accessible road to the west of the pedregal. Company A was sent to meet with Lee at San Augustin to commence road repairs on this western route. Five hundred infantrymen were sent as the labor party. The company was then split up into five groups and spent the next several days supervising repairs to the path.<sup>37</sup>

While the Engineer Company kept repairing roadways, the infantry of the army was on the move, capitalizing on the maneuverability afforded to them by the Engineers. However, at the village of Padierna, the American infantry came under the fire of a number of Mexican guns. The Americans deployed their own artillery, which temporarily held up the Mexicans long enough for three brigades of infantry to move into position in the rear of the Mexican guns.<sup>38</sup>

By the time the American guns were forced to retreat, the Americans who were prepared to counterattack found themselves in a difficult position. Unbeknownst to Scott or any of his subordinates, Santa Anna had re-assembled his forces that were so badly beaten at Cerro Gordo into an intimidating fighting force. Santa Anna's main body was headed for Padierna from the north, pinning the three brigades between two larger Mexican forces.<sup>39</sup>

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<sup>37</sup> Smith (89-92)

<sup>38</sup> Brooks (172-175)

<sup>39</sup> Wheelan (150)



Scott was so convinced that the Mexican resistance would be minimal that he remained in San Augustin and left the fight to his subordinates, who now found themselves in quite a dilemma. Lee, who was with the infantry brigades, personally made his way back through the treacherous pedregal to inform Scott of the situation. He arrived at Scott's headquarters late on the night of August 19, 1847. Scott honored the request of Brigadier General Persifor Smith, commander of the surrounded troops. He sent a body of troops to bluff an attack against the Mexican positions at Padierna. This would buy time for the American troops caught behind enemy lines, which now included Company A, to reorganize and attack the Mexican defensive works.<sup>40</sup>

The Engineers were to accompany the Rifle Regiment in a flanking attack that would commence shortly after the infantry had engaged the enemy in the front. They did so precisely on time, catching the Mexicans completely off guard. According to Smith's report "That fire was very destructive. The Mexicans were astounded". The Mexicans hastily retreated. During the retreat, Company A's Lieutenant Foster led two regiments of infantry into the retreating Mexicans.

This action, known later as the Battle of Contreras, was Company A's third major engagement. It proved that the Engineers of Company A were extremely capable with both the pick and shovel and the musket. They had provided crucial support in the fields of mobility and counter-mobility, as well as accompanying and often leading their infantry comrades into the hottest of actions. They also had the distinct honor of

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<sup>40</sup> Riese (90-92)

capturing the colors of the 12<sup>th</sup> Artillery, one of the Mexican gun batteries that had harassed the Americans the day prior.<sup>41</sup>

From Contreras, the Americans rapidly chased the Mexican army to Cherebusco. This was an important river crossing and the last place from which to defend the capital city. There, the Mexicans had constructed a bridgehead and fortified a convent. They had received the order from Santa Anna to hold this position at all costs.<sup>42</sup>

The Engineers were now at the head of General Twigg's division and were heading directly for the fortified convent. The Engineer Company was sent out to reconnoiter the enemy's position and engaged in a heavy firefight with the entrenched Mexicans. Smith reported his situation to General Twiggs, who informed Smith that Lee also had a scouting party engaged with the enemy. Their solution was to bring up two companies of infantry support and a single cannon to deliver several well-placed rounds that would scatter the Mexicans at the convent.<sup>43</sup>

The gun that was brought up drew heavy fire from the Mexicans, which killed or injured the majority of its crew. Its surviving crewmembers were forced to retreat and were replaced by an entirely new battery. The new guns opened fire. Unfortunately, this pinned the Engineers in a ditch midway between the battery and convent. From here, Smith was able to help advise Twiggs as to the strengths and weaknesses of the enemy position, though the company itself took cover as the main body of American troops advanced. They would take no further part in the Battle at Cherubusco.<sup>44</sup>

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<sup>41</sup> Smith (61-64)

<sup>42</sup> Brooks (173-177)

<sup>43</sup> Smith (66)

<sup>44</sup> Riese (100-105)

The battles at Contreras and Cherubusco were costly for the Mexican army. Company A had been responsible for a great deal of infantry's success. The Engineers now had earned four battle streamers to place upon their guidon.<sup>45</sup>

Following the two battles, a temporary truce was negotiated which called for a cessation of all military objectives. The Mexicans clearly violated the truce by engaging in the strengthening of the fortifications of Mexico City. Scott, perfectly aware of the violations, was so convinced that he could take the city that he did not object. The truce came to an end on September 6 when the governments of the warring nations could not come to an agreement on national boundary lines.<sup>46</sup>

As the preparations and reconnaissance needed to take Mexico City began, Scott became aware of a small Mexican force gathered at an old cannon foundry known as Molino del Rey. The decision was made to take the outpost and a storming party of five hundred men was hand picked for the mission.<sup>47</sup> Ten men from Company A were selected for the party, including Lieutenant Foster.<sup>48</sup> However, Santa Anna expected an attack at Molino del Rey and strongly reinforced the position. Scott's plan for a small skirmish turned into a full-scale battle that the Americans did not anticipate. Molino del Rey marks the only battle of Scott's campaign that was not a complete American victory. The Mexican force at the old foundry was eventually neutralized. Afterward it was discovered that they had engaged in the killing of wounded and surrendering Americans. This news would enrage the Americans and bring about retribution later.<sup>49</sup>

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<sup>45</sup> Riese (107)

<sup>46</sup> Wheelan (149-150)

<sup>47</sup> Brooks (202)

<sup>48</sup> Riese (110)

<sup>49</sup> Brooks (207-209)

The decision now became whether or not to take the castle of Chapultapec before attacking Mexico City itself. On September 11, 1847, a council of war was held by Scott to discuss the option. The majority of the council favored avoiding the large fortress and attacking the capital itself. It was not until hearing Lieutenant Beauregard's opinion of bluffing an attack on the Mexican capital and then storming Chapultapec that the senior officers began to seriously consider attacking this formidable position first.<sup>50</sup>

Though the Mexican army now heavily outnumbered the American forces present, Santa Anna did not know from where the attack would come. This caused him to distribute his forces over a variety of points. In order to perpetuate the Mexican commander's disarray and cause him to further spread his forces, the Americans made a series of maneuvers in deliberate view of the city, only to return to their original positions after nightfall.<sup>51</sup>

While these bluffing maneuvers were underway, Company A began to erect gun platforms that Scott hoped that his artillery could use to annihilate the masonry of the fort before the attack would begin.<sup>52</sup> With Smith overseeing the first battery and McClellan supervising the second, labor parties worked for several days on the platforms. Smith then recalled his Engineers to build ladders and other tools the storming party would require.<sup>53</sup>

Artillery fire opened from these newly constructed positions at dawn on September 12. With the memory of the Mexican treatment of the wounded at Molino del Rey still fresh in their memories, the assault troops climbed the Engineers' ladders and

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<sup>50</sup> Smith (67)

<sup>51</sup> Brooks (217-220)

<sup>52</sup> Brooks (222)

<sup>53</sup> Smith (71)

stormed the castle. Held by a small garrison of two hundred and sixty soldiers, including Mexican war college cadets, the attack on the castle proved less costly than expected. Approximately two hours after the batteries opened fire on Chapultepec, the American colors were raised over the fort. After a series of hard fought infantry battles, the men of Company A proved they were still as effective as ever in the art of siege laying.

Company A joined General Worth's division following the fall of Chapultepec. Smith received orders from Worth to scout the Mexican positions around Mexico City. After careful observation, Smith came up with a plan to take his Engineers, armed with muskets and picks, to advance into the city. They would go house by house by breaking through walls and would eventually reach a large building he had previously observed. The men would then ascend to the top of that building and fire upon the artillery positions guarding the causeway into the city from the rear, allowing for the infantry to attack the Mexican works. Worth approved and the attack was carried out.<sup>54</sup>

The Engineers bravely paved the way for the rest of Worth's forces to take the main gate and then pressed further into the city. With the Engineers several hundred yards in advance, Smith continued to advance his men to within range of more Mexican artillery. These guns were fortified in a convent deep into the center of the city. Smith requested a force of five hundred infantrymen to support his Engineers on another daring assault. Again he planned to attack this artillery position from the rear. However, with night falling, Worth ordered the persistent Smith and the Engineer Company to remain behind cover, out of sight of the Mexican position.<sup>55</sup>

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<sup>54</sup> Riese (117-118)

<sup>55</sup> Smith (69-70)

At 2 A.M. the following morning, the Engineers resumed their house-to-house search through the city of two hundred thousand inhabitants. Every large building was considered a possible enemy hideout and was thoroughly searched. Upon daybreak, Smith observed from a building of high elevation that the way to the National Palace was now clear and Worth's entire division advanced with the Company of Engineers leading the way. They were soon halted by orders from Scott, who wished to be at the head of his army when they entered the heart of the capital city. The fight for Mexico was won.<sup>56</sup>

The occupation of Mexico City was uneventful. Scott worked with locals to prevent the lawlessness that terrorized the city when Santa Anna released some thirty thousand convicts upon his withdrawal from the city. The ensuing time Company A spent in Mexico was highlighted by the receiving of new uniforms and the suspension of regular drill. The Treaty of Guadalupe Hidalgo was signed on February 2, 1848, officially ending the war.<sup>57</sup> Smith turned command of the company over to McClellan, as he left to attend to the estate of the late Captain Swift.<sup>58</sup>

From Mexico City, Company A marched back to Vera Cruz, where they set sail for West Point via New York City. Upon reaching West Point, the company was placed under the command of Captain George W. Cullum, until Smith, still finishing work on Swift's estate, arrived and resumed command. By this time, the enlistment papers of the majority of enlisted men in the company had expired, and the company was reduced to a small detachment.

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<sup>56</sup> Riese (120-121)

<sup>57</sup> Brooks (241-245)

<sup>58</sup> Smith (72)

With the War with Mexico over, the men of Company A returned to their duties as instructors at West Point. They would remain there until the outbreak of the American Civil War. While the ending of the story of the Engineer Company in Mexico may seem uneventful, the reputation they gained as hard working engineer troops and hard fighting infantrymen endured. So important were the contributions of Company A and the Corps of Engineers' officers in the War with Mexico that the company was expanded into an entire battalion upon the outbreak of the American Civil War. By that war's end, there would be a full brigade of engineer troops in the Federal Army of the Potomac.<sup>59</sup> The officers who led and worked directly with Company A-Gustavus Smith, George McClellan, Robert E. Lee and P.T.G. Beauregard-would find themselves leading entire armies into battle during the War Between the States.<sup>60</sup>

Now known as Alpha Company, 1<sup>st</sup> Engineer Battalion, the descendants of Company A would go on to fight in every American conflict from Mexico to operations in Iraq and Afghanistan. The Corps of Engineers now numbers in the tens of thousands, with dozens of battalions ready to do civil or military work anywhere in the world. Engineers would be the first to land on the beaches of Normandy in 1944 and would clear minefields ahead of the NATO advance into Iraq during Operation Desert Shield.<sup>61</sup> The role of the engineers remains as indispensable today as it did in 1846. Though the technology being used is light years ahead of where it was in the mid nineteenth century, the same basic principles of mobility and counter mobility, survivability and sustainment

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<sup>59</sup> Riese (131)

<sup>60</sup> Norman (173)

<sup>61</sup> Riese (133-139)

engineering, remain as crucial in the armies of today and tomorrow as they did to a group of seventy five recruits from West Point over one hundred and sixty years ago.



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