

the south. Elliott's South Carolinians were posted around the salient under which the mine was dug, with the 26th, 17th, 18th, 22nd and 23rd regiments arranged from left to right. Five companies of the 22nd South Carolina, manned the actual salient, with the 17th and 28th South Carolina to their left and the remainder of the 22nd, 18th and 23rd South Carolina to their right. A battery composed of four Napoleon 12-pounders was also situated in the fort, manned by the Virginia battery of Captain Richard G. Pegram.

THE ASSAULT BEGINS

As dawn approached, the massed formations consisting of about 9,000 men of the IX Corps, supported by 8,000 troops with the XVIII Corps, a further 5,000 in the V Corps, and a division of the X Corps, awaited the signal to begin the attack. Burnside arrived at his advanced headquarters, known as the "Fourteen Gun Battery," or Fort Morton (after engineer officer Major James St Clair Morton killed on June 17 near that location), at about 2 a.m. About 600 yards behind the centre of the IX Corps lines, it provided a good view of the ground over which the action would take place. Meade and staff occupied Burnside's regular headquarters at about 3.15 a.m., and shortly before the scheduled detonation of the mine. Situated centrally with good telegraphic communications, it was about a mile from the trenches where the IX Corps was massing, and nothing could be seen of what would take place in the Crater from that point.

The electromagnetic telegraph had been developed by Samuel Morse during the 1840s, and had become a vital aspect of the communication system of the US Signal Corps since June 1861. Its correct use during the action that followed might have produced a model example of post-Napoleonic warfare. However, this turned out not to be the case. Although Meade used the telegraph to continually request updates on the progress of proceedings leading to the attack, Burnside consistently refused to respond. As a result, what could have helped achieve victory simply exacerbated the tension between the two commanders.

As Meade set out for Burnside's HQ, he had a telegraphic message relayed to Burnside stating that, due to the extreme darkness of the early morning, he could delay the detonation of the mine until it became lighter. In disagreement with this decision, Burnside failed to send a reply via the telegraphic operator in Fort Morton, and went ahead with the original plan and timing. But as the minutes ticked by, and the deadline for detonation passed and nothing happened, Burnside remained impossible to contact. Believing at first that the delay was caused by a miscalculation in the timing of the fuse, he dispatched an aide-de-camp to the mineshaft to establish the cause. Meanwhile, Meade became increasingly concerned at the lack of communication. Joined by Grant, he also sent an aide to Burnside to find out what was going on, but the aide did not find his way back. Finally, at 4.15 a.m., Meade used the telegraphic wire again to send a message urgently requesting a reason for the delay. As there was nothing to report, Burnside again did not respond, and continued to ignore a further telegraphed dispatch to the same effect. Becoming infuriated at Burnside's stubborn refusal to take advantage of a state-of-the-art communication system, Meade sent a further message stating that if the mine was not going to be detonated, he would make other arrangements for an attack anyway. Once again, Burnside refused to respond. At this point, Meade finally ordered a general assault, whether the



a



b

Established on June 21, 1861, under A.J. Myer, the US Signal Corps was commanded by Colonel Anson Stager, a prewar general superintendent of the Western Union Telegraph Company, by 1864. If used properly, the military telegraph would have vastly improved communications between Meade and Burnside on July 30, 1864. These engravings (both of which are from the author's collection) were published in *Harper's Weekly* on January 24, 1863, and were accompanied by the following captions:

(a) The Army Telegraph – setting up the wire during an action.

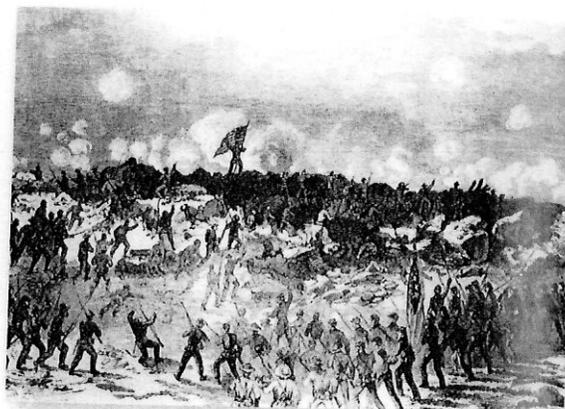
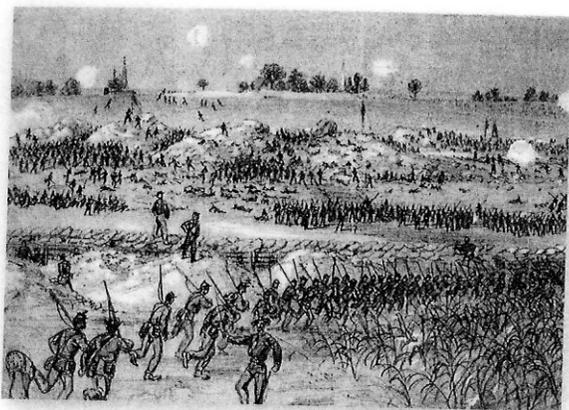
"Of this important institution he [artist A.R. Waud] says: 'The army signal-telegraph has been so far perfected that in a few hours quite a large force can be in constant connection with head-quarters. This, while a battle is progressing, is a great convenience. The wire used is a copper one insulated, raised on light poles, made expressly for the purpose, on convenient trees, or trailed along fences. The wire and the instrument can be easily carried in a cart, which as it proceeds unwinds the wire, and, when a connection is made, becomes the telegraph-office. Where the cart cannot go the men carry the drum of wire by hand. In the picture the cart has come to a halt, and the signal-men are hastening along – some with the drum, while others with crow-bars make the holes for the poles, upon which it is rapidly raised.

(b) The operator at work.

"The machine is a simple one, worked by a handle, which is passed around a dial-plate marked with numerals and the alphabet. By stopping at the necessary letters a message is easily spelled out upon the instrument at the other end of the line, which repeats by a pointer every move on the dial-plate. The whole thing is so simple that any man able to read and write can work it with facility."

mine was detonated or not. Meanwhile, Burnside was at last informed by a staff officer that the mine's fuse had gone out, but had been re-lit and that the charge would be ignited any minute. In fact, Sergeant Reese (overseer of the mining) and Lieutenant Jacob Douty, Company K, 48th Pennsylvania, had bravely entered the mine, discovered the problem and remedied it.

At about 4.45 a.m. there was a dull roar, and soil and smoke belched forth from the ground where the Confederate earthworks once stood. Lieutenant J.J. Chase, 32nd Maine, was asleep when the explosion occurred and recalled, "suddenly I was awakened. Oh horrors! Was I in the midst of an earthquake? Was the ground around me about to part and let me into the bowels of the earth. Hardly realizing where I was or what it all meant, this terrible thunder, accompanied by the upheaving and rocking of the ground, springing to my feet I recovered my senses enough to understand that an explosion had taken place. Glancing in the direction of Cemetery Hill, I beheld a huge mass of earth being thrown up, followed by a dark lurid cloud of smoke." According to aide-de-camp Major William H. Powell, 4th US Infantry, "It was a magnificent spectacle, and as the mass of earth went up into the air, carrying with it men, guns, carriages, and timbers, and spread out like an immense cloud as it reached its altitude, so close were the Union lines that the mass appeared as if it would descend immediately upon the troops waiting to make



ABOVE LEFT
 Inscribed on the reverse side "Petersburg Mine, Va./July 30, 1864/23d U.S. colored/18th U.S.," this pencil and Chinese white drawing is accompanied by the following on-the-spot description by artist Alfred Waud: "The advance to the 'crater' after the explosion of the mine. In the middle distance are the mounds of earth thrown up by the explosion: beyond upon the high ground cemetery hill the Confederates' inner line of works, which if they had carried, would have given the Union Army Petersburg and Richmond. In the foreground troops are seen advancing to and beyond Burnside's outer intrenched [sic] line and moving upon the Confederate defenses. These were – on the left Bartlett's Massachusetts brigade, and on the right, the Negro troops – this sketch was made about 8 AM July 30th 1864." (Library of Congress LC-USZC4-10794)

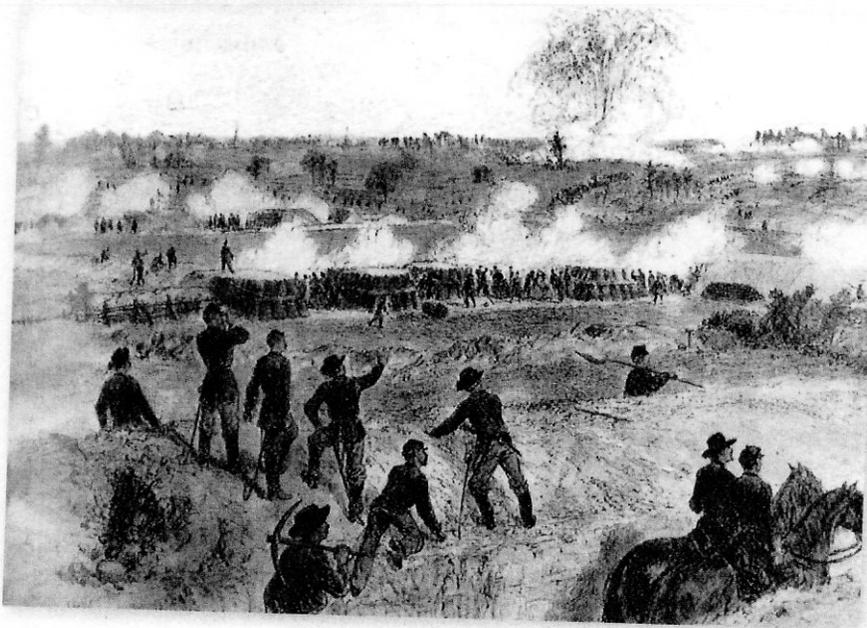
ABOVE RIGHT
 Entitled "Charge of the 2nd Division, 9th Army Corps, into the Crater," this depiction of an eyewitness sketch by artist Andrew McCallum, was accompanied by a report stating that the assault was made "bravely, but from faults which the court of enquiry will explain, time had been lost, officers were absent, and the result was a sad slaughter of men whom the country cannot afford to lose." (Author)

the charge. This caused them to break and scatter to the rear, and about ten minutes were consumed in re-forming for the attack. Not much was lost by this delay, however, as it took nearly that time for the cloud of dust to pass off. The order was then given for the advance."

The first Union troops to move forward were the Second Brigade, First Division, XVIII Corps, the first line of battle being composed of the 2nd Provisional Pennsylvania Heavy Artillery, commanded by Lieutenant Colonel Benjamin G. Barney. The second line consisted of the 14th New York Artillery, under Captain Lorenzo I. Jones. Following up in a third line of battle was the 3rd Maryland Battalion, led by Lieutenant Colonel Gilbert P. Robinson, and the 179th New York Volunteers, with Major John Barton at their head. As no part of the Union line of breastworks had been removed, these men clambered over them as best they could. This in itself broke up the ranks, but they did not stop to re-form and pushed ahead toward the crater, which was about 130 yards distant. As debris from the explosion had covered up the abatis and chevaux-de-frise in front of the enemy works, passage across no man's land was rendered less difficult.

These men little anticipated what they would see upon arrival at the crater left by the explosion. An enormous hole about 30 feet deep, 60 feet wide and 170 feet long, was filled with dust, chunks of clay, gun tubes, broken carriages, projecting timbers and men buried in various ways – some up to their necks, others to their waists, and some with only their feet and legs protruding from the earth. Half the Confederate salient had been destroyed. About 350 men were killed or wounded by the explosion. Two of the 12-pounder Napoleons had been hurled into the ground in front of the Union lines. The remaining two guns still stood in the southern part of the earthwork, which survived the destruction. In total, the 22nd South Carolina sustained an immediate loss of 170 killed and wounded. The 18th South Carolina lost 43 killed and 43 wounded; the 17th South Carolina, 25 killed and 8 wounded; and the 23rd South Carolina, 14 killed and 41 wounded. Pegram's battery suffered 22 killed and wounded.

Having advanced with the Pennsylvanians, Major William recalled the arrival of Union troops at the resulting crater: "The whole scene of the explosion struck every one dumb with astonishment as we arrived at the crest of the debris. It was impossible for the troops of the Second Brigade to move forward in line, as they had advanced; and, owing to the broken state they were in, every man crowding up to look into the hole, and being pressed by the First Brigade, which was immediately in rear, it was equally impossible to

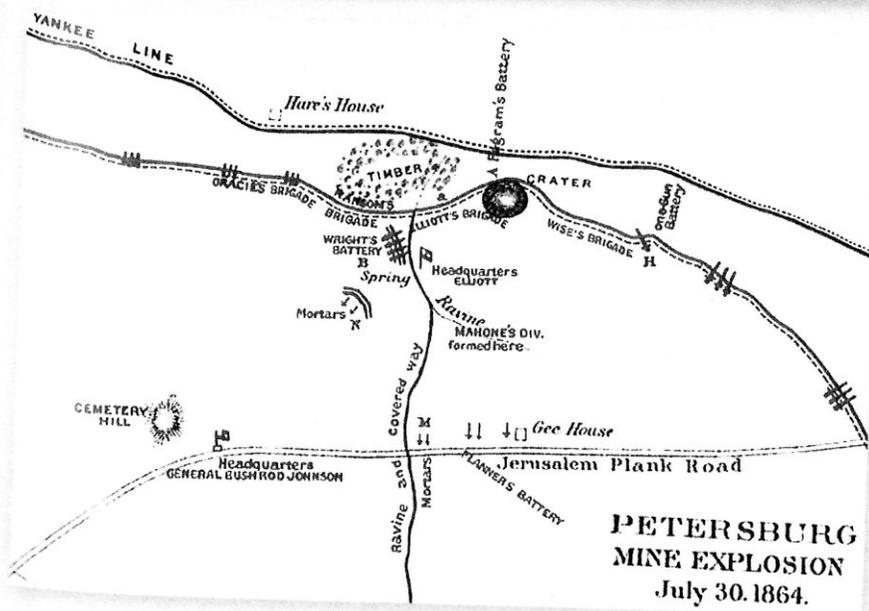


TOP LEFT

This watercolor was based on a sketch made by Alfred Waud in the trenches of the V Corps, and shows the moment of the mine explosion. The bearded officer in the foreground watching through field glasses is Major James Duane, Chief Engineer of the Army of the Potomac, and the others represent his staff officers. (Courtesy of the National Park Service)

BOTTOM LEFT

This map from the *Official Military Atlas of the Civil War* shows the deployment of Confederate troops and location of their commanders and artillery during the battle. (Author's collection)



move by the flank, by any command, around the crater. Before the brigade commanders could realize the situation, the two brigades became inextricably mixed, in the desire to look into the hole.”

Despite the confusion in and around the Crater, Colonel Marshall yelled to his brigade to move forward, and the men obeyed, jumping, sliding, and tumbling into the huge gaping hole, and scrambling over the debris, and dead and dying men. They were followed by General Bartlett’s First Brigade of Massachusetts men. Meanwhile, on the other side of the crater the leading members of the Second Brigade attempted unsuccessfully to climb up and over the rim. In doing so, many were killed by musket shots from the rear, fired by the Confederates who still occupied the traverses and entrenchments to the right and left of the Crater.

Arriving with Bartlett's brigade, and in command of the 56th Massachusetts, Colonel Stephen M. Weld, Jr later recorded, "Here, in the crater, was a confused mob of men continually increasing by fresh arrivals. Of course, nothing could be seen from this crater of the situation of affairs around us. Any attempt to move forward from this crater was absolutely hopeless. The men could not be got forward. It was a perfect mob, as far as any company or regimental organization was concerned, and that necessarily from the way we went forward, and not from any fault of the officers or men. To ask men to go forward in such a condition was useless. Each one felt as if he were to encounter the whole Confederate force alone and unsupported. The moral backing of an organized body of men, which each would sustain his companions on either side, was wanting."

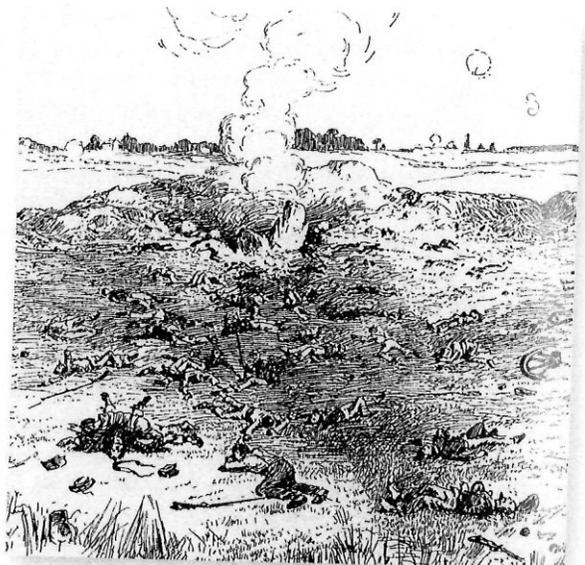
Meanwhile, the Confederate survivors were initially in a state of shock. Commanding the 17th South Carolina and Evan's Brigade after the wounding of Stephen Elliott, Colonel Fitz William McMaster recalled, "For some minutes there was the utmost consternation among our men. Some scampered out of the lines; some, paralyzed with fear, vaguely scratched at the counterscarp as if trying to escape. Smoke and dust filled the air." Colonel David G. Fleming, commanding the 23rd South Carolina, was blown up by the explosion. Command of both the 22nd and 23rd South Carolina devolved upon Captain Joseph N. Shedd, Company E of the former regiment, who by "his coolness and intrepidity," rallied some of the survivors. According to Union Major Powell, one of the Confederates pulled out of the exploded earth after the arrival of Ledlie's division proved to be "a second lieutenant [William H. Scott] of the battery which had been blown up. The fresh air revived him, and he was soon able to walk and talk. He was very grateful and said that he was asleep when the explosion took place, and only awoke to find himself wriggling up in the air; then a few seconds afterward he felt himself descending, and soon lost consciousness."

Regaining their senses, many South Carolinians manned what remained of the earthworks and put up a defensive fire. According to McMaster, "they began to cheer, and our men bounded on the banquette and commenced firing on the ranks of men who were rushing in without firing a gun. By this some

Several sketches produced by eyewitnesses captured the death and destruction following the detonation of the Petersburg mine.

LEFT This detail from the work of Frank Leslie's artist E.F. Mullen shows one of the huge chunks of clay hurled into the air by the explosion.

RIGHT Commanding a Confederate artillery battalion near Elliott's Salient, Major James C. Coit made this sketch while burying the dead of the Crater battle under a flag of truce. (Author's collection)



of the men of the gallant Eighteenth, who extricated themselves from the bank which covered them, came rushing down the trenches, and as many as could picked up guns and began firing. For a considerable time the firing was done entirely by the infantry.”

South of the Crater Major Wade Gibbs, a determined artillery officer, gathered enough willing hands together to work a gun from Davidson’s battery which had been abandoned after the explosion. At a range of 1,000 feet this single piece soon began to cause havoc among the Union troops clinging to the southern edge of the crater.

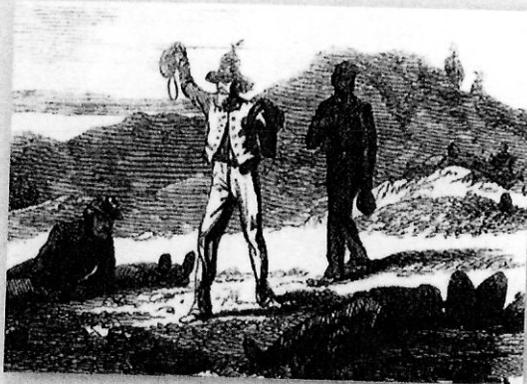
Not all the Union troops were phased by the surrounding chaos. A detachment of the 14th New York Artillery under Sergeant Wesley Stanley, Company D, seized the two Confederate cannon remaining after the explosion and turned them on their assailants to the south. Other groups of men began to dig in. Armed with Model 1860 Spencer repeating rifles, Company K, 57th Massachusetts, commanded by Captain Benjamin A. Spear, also harassed the enemy artillery in their front. First Sergeant Barnard A. Strasbaugh, Company A, 3rd Maryland Battalion, led another squad of sharpshooters armed with this weapon. During the confused fighting, he single-handedly captured eight Confederate prisoners. For this action, and for recapturing the flag of the 2nd Pennsylvania Heavy Artillery, he was awarded the Medal of Honor. However, these tactics merely exacerbated the situation, as the main objective of the first two brigades of assault troops was to press on and capture Cemetery Hill beyond.

In the absence of any divisional leadership, brigade and regimental commanders attempted to salvage the situation. The 179th New York and 3rd Maryland Battalion tried unsuccessfully to push into the hanging Confederate flank to the north. The 2nd Pennsylvania Heavy Artillery advanced the farthest west, reaching just beyond the edge of the crater. Meanwhile, the attack of the 3rd Division north of the Crater and that of the 2nd Division to its south were both stalled, as they were dependent on Ledlie’s division acting as a spearhead for the whole operation.

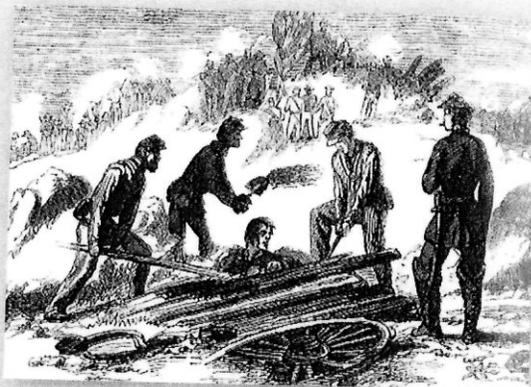
Meanwhile, about half an hour after the mine detonation, Ledlie took shelter in a bombproof being used as a dressing station about 55 yards to the rear of the Union front line, where he plied himself with rum borrowed from an army surgeon. When Major Powell arrived later to advise his commander that his troops either side of the hole created by the explosion would need to be cleared as they were being pushed back into the mass of the 1st Division struggling in the crater, he repeated an earlier order directing them to “advance on Cemetery Hill.” Joined soon after by Ferrero, who also imbibed from the rum jug, Ledlie received an order from Burnside stating: “The general wishes you to move your troops forward to the crest of the hill and hold it.” In response, Ledlie sent an aide into the crater to pass on the order. There next came an order for Ferrero to “move his division through and charge down to the city,” to which he responded cryptically – he would do so “as soon as those troops were out of the way.” After receiving a second and third order to the same effect, Ferrero left the bombproof accompanied by Ledlie to at last carry out the command. Placed at his disposal as an adviser, Colonel William W. Loring, Inspector General on the staff of Burnside, next insisted that Ferrero wait while he sought out the IX Corps commander to inform him of the true situation, and that sending the African-American division into the crater would only add to an already hopeless situation. Loring returned shortly after to inform Ferrero that the order was preemptory.



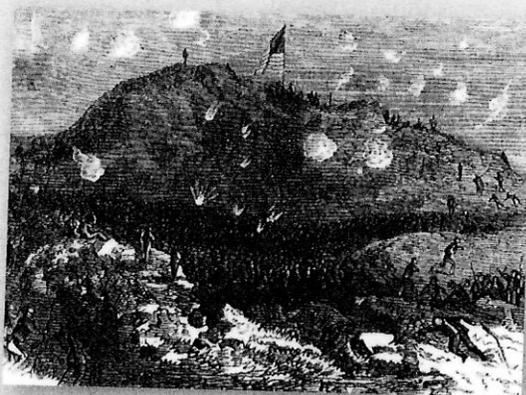
Commanding the First Brigade, First Division, IX Army Corps, during the disastrous assault on the Crater in July 1864, General William Francis Bartlett (1840–76) was a student at Harvard when he enlisted as a private in the 4th Massachusetts Volunteers in 1861. Commissioned a captain in the 20th Massachusetts Infantry, he lost a leg at Yorktown in early 1862. Following recovery, he received the colonelcy of the 49th Massachusetts in November 1862 and took part in the capture of Fort Hudson in July, 1863. Receiving a less severe wound at the Wilderness in May, 1864, he was able to accept a brigade command. After having his cork leg shot away in the Crater, he asked to be lifted up in order to see the approach of Sander’s Confederate brigade, whereupon he was hit by a ball which badly gashed his scalp. Taken prisoner and placed in Libby Prison, he was returned north as part of a prisoner exchange, and placed in command of the IX Corps, which he led with distinction until the end of the war. For gallant and meritorious services, he was brevetted Major General of US Volunteers on March 13, 1865. (US National Archive NWDNS-111-B-4591)



a



b



c



d

Published as a set on the front cover of *Frank Leslie's* on August 27, 1864, these engravings were entitled "Incidents in the battle of Petersburg after the explosion of the Mine." (a) Some Confederates showed compassion and carried water to fallen Union soldiers holding up a canteen as a "flag of truce." (b) Captioned "Come Yanks, for God's sake take me out of this place! It is all over now, and there's no use letting a fellow stick here," this engraving shows Union troops rescuing a Rebel half buried by the mine detonation. This was probably inspired by the rescue of Second Lieutenant William H. Scott of Pegram's battery. (c) Several Union regiments, including the 29th USCT, managed to plant their colors on the opposite rim of the Crater, as shown in this depiction of the battle. (d) With varying success, many Union wounded attempted to cross back over to their own entrenchments during the battle. (Author's collection)

The Fourth Division finally received the order to charge at about 7.30 a.m. The First Brigade, under Colonel Joshua K. Sigfried, went forward first, followed by the Second Brigade led by Henry G. Thomas. Watching from his trench sector Captain James H. Clark, 115th New York, reported: "A colored division mount the works, and they too go forward on the charge. We watch eagerly, it is their first fight and we wonder if they will stand the shock. Noble fellows! Grandly they cross the field; they are under a quivering [sic] fire, but still rush on regardless of fallen comrades, and the storm of pitiless lead and relentless grape that pours upon them three sides, and gain the works with a ringing cheer."

According to the battle report of Colonel Sigfried, great difficulty was then experienced passing through the crater, "owing to its crowded condition – living, wounded, dead, and dying crowded so thickly." But make their way they did. The 43rd USCT then rose up and charged over the crest of the crater, reaching the Confederate support line trenches. There they captured a number of prisoners, a "rebel stand of colors," and re-captured a "stand of national



Based on an oil painting by John Elder, which was commissioned by William Mahone in 1869, this steel plate engraving depicts the 12th Virginia leading the charge into the Crater during the Confederate counterattack. The staff of the battle flag carried by this regiment was snapped in two during this action, but was quickly spliced back together with a ramrod and planted on the earthworks after the Confederates had reclaimed what remained of Elliott's Salient. (*Battles & Leaders*)

colors.” However, the toll on officers and men was great. Colonel Delevan Bates, commanding the 13th USCT, fell shot through the face at the head of his regiment, for which he received a posthumous Medal of Honor. Major James C. Leeke, of the same regiment, stood on the ramparts urging his men forward with blood from a chest wound gushing from his mouth.

Colonel Henry G. Thomas, leading the Second Brigade, reported: “The instant I reached the First Brigade I attempted to charge, but the Thirty-first was disheartened at its loss of officers and could not be gotten out promptly. Captain [Marshall L.] Dempey and Lieutenant [Christopher] Pennell and myself then attempted to lead them, but the fire was so hot that half the few who came out of the works were shot. Here Lieutenant Pennell was killed and riddled through and through. He died with the flag in his hand, doing everything an officer could do to lead on the men ... Immediately after this I was ordered by Brigadier General Ferrero to advance in concert with Colonel Sigfried and take the crest. I ordered the Twenty-ninth this time to lead, which it did gallantly, closely followed by the Twenty-eighth and a few of the Twenty-third, when it was at once engaged by a heavy charging column of the enemy, and after a struggle driven back over our rifle-pits. At this moment a panic commenced. The black and white troops came pouring back together. A few, more gallant, than the rest, without organization, but guided by a soldier’s instinct, remained on the side of the pits nearest our line and held the enemy at bay some ten or fifteen minutes, until they were nearly all shot away ... Whether we fought well or not, the scores of our dead lying thick as if mowed down by the hand of some mighty reaper and the terrible loss of officers can best attest.”

THE CONFEDERATE COUNTERATTACK

In his headquarters at Dunn’s Hill, Robert E. Lee was alerted to the desperate situation caused by the detonation of the Union mine by a staff officer sent by Beauregard, who had been awakened by the explosion in Petersburg. Lee immediately gave orders for two brigades of Anderson’s division, 3rd Corps, commanded by Brigadier General William “Little Billy” Mahone, to reinforce Johnson’s reeling troops. Posted at the Wilcox Farm near Lieutenant Creek