

The
Huntsville
HISTORICAL
Review

Vol 3 July 1973 No 3

*Published Quarterly by the
Huntsville Historical Society*

THE HUNTSVILLE HISTORICAL SOCIETY

FOUNDED 1951

OFFICERS, 1972-73

Mr. James Record President
Mrs. Roy E. Blair. Vice-President
Mrs. C. H. Russell Recording Secretary
Mrs. Wayne L. Smith Corresponding Secretary
Miss Kathleen Johnston Treasurer

BOARD OF GOVERNORS: The Officers and elected Directors: Herbert L. Hughes, Harvic Jones, Oscar Mason, Mrs. Thomas W. Rosborough, Mrs. Richard Gilliam and Elbert L. Watson; and past Presidents: Miss Alice Thomas, Dr. Frances Roberts, Robert B. Smith, Mrs. Sarah H. Fisk, Joe Falt, Jr., and Dr. William McKissack.

The Huntsville Historical Review is sent to all members of the Huntsville Historical Society. The annual membership is \$5.00. Libraries and organizations may receive the "Review" on a subscription basis for \$5.00 per year. Single issues may be obtained for \$1.25 each.

Correspondence concerning contributions, editorial matters, and gifts should be sent to Elbert L. Watson, P. O. Box 666, Huntsville, Alabama 35804.

Responsibility for statement of facts or opinion made by contributors to the Review is not assumed by either the editor, Board of Editorial Advisors, or Huntsville Historical Society. Questions or comments concerning such matters should be addressed to the authors.

Permission to reprint any article in whole or in part is given, provided credit is given to the Review.

The editor and Board of Editorial Advisors are primarily interested in articles and documents pertaining to Madison County. Articles on the history of other sections of the state or area will be considered when they relate to Madison County. All copy, including footnotes, should be double-spaced; with the footnotes typed on separate sheets at the end of the article. The author should submit an original and a carbon.

THE HUNTSVILLE HISTORICAL REVIEW

Huntsville, Alabama

Volume 3

July, 1973

Number 3

Editor
Elbert L. Watson

PUBLISHED BY
THE HUNTSVILLE HISTORICAL SOCIETY

CONTENTS

DIARY OF CHAPLAIN ELIJAH E. EDWARDS Part III	3
HISTORY OF HUNTSVILLE WATER WORKS Frank Wilson	25

BOARD OF EDITORIAL ADVISORS

Sarah Fisk, Chairman

W. M. McKissack, M.D.

Cleo Cason

Ezell Terry

Philip Mason

CONTRIBUTORS

FRANK WILSON is the Director of Customer Relations at Huntsville Utilities.

DIARY OF CHAPLAIN ELIJAH E. EDWARDS

Part III

Continued from last issue

Spanish Fort. Mar. 30. 1865

To me, the most disturbing personal incident of today is the loss of my mail. It should have followed me from the New Orleans Hospital to the Field Hospital here. Two or three letters did thus arrive, but the postmaster of the Regiment had heard a rumor that I had gone to Indianapolis and trusting it implicitly, he sent the letters after me to that point. The rumor had a basis. One of the sutlers had written to the Camp from Dauphin Island that I had been there, and then in the same letter referring to another person, a certain Capt. Curtis who was nicknamed "the chaplain" for his solemnity of manner, wrote that "the chaplain" had gone home. It was considered quite a joke on me also that this same Capt. impersonated me at a card table and won me a great reputation as an expert euchre player.

March 31st

The siege is steadily progressing, without much evidence as to result. It is discouraging to be told that it may continue for weeks, before the critical time arrives in which the bugles shall sound an advance. Possibly we may starve them out by cutting off their supplies. In the picture of a bomb proof, of yesterday,



SHARP'S LANDING 40 Years Later

all the soldiers visible were idly lolling in its shelter. Not all of the soldiers are hiding in rifle pits and holes in the ground. While some are resting, or awaiting orders, others are on skirmish lines, or digging zig-zag approaches to the Fort protecting themselves by throwing up the earth on the side of the ditch next to the Fort. Most of them in fact are busy as beavers. One soldier who shows his head above his defenses becomes at once a mark for the sharpshooters in the Fort. Some are over-venturesome and come to grief. Others, more cautious and inspired by a sense of humor, rig up a stick scarecrow fashion, by hanging a blouse or coat upon a cross piece fixed upon it, over which they hang a felt hat, and lift it above the bank of earth that is thrown up for a protection, and are delighted if it is perforated by bullets. They will take it home to show as a proof of their heroism.

April 1st

The artillery firing is from rifled cannons or mortars. The first send percussion shells, weighing, I would think, some of them as much as 64 lbs, shrieking as they pass above us like infuriated demons; but generally passing over us sometimes to the distance of two or three miles. They are wasting on us a great deal of good ammunition. The second mentioned are mortars which toss 8 or 10 inch shells up into the air at an angle of more than 45 degrees, or so nearly vertical that they are calculated to fall and explode somewhere within our lines. These are more dreaded than the first named, as unwelcome visitors that drop in unexpectedly and always produce a sensation.

There have been no casualties in the 7th Regiment save those already mentioned. I am spending my time chiefly in the hospital, but frequently visiting the front. Wounded men are brought into the hospital at the rate



Union soldier's rig up a stick scarecrow to show their heroism.

of four or five a day. Yesterday, some of Gen. [Fred] Steele's men brought in 400 prisoners, among them, a general officer and a paymaster with \$400,000 in rebel scrip. (see note below)* This news has greatly encouraged the boys, and they feel certain that but few more days will pass before the surrender of the Fort. Meanwhile they call for a distribution of the scrip.

April 2nd, Sunday morning.

We see by the late St. Paul papers that they have been drafting men in Minnesota. They will have to hurry them off if they expect them to be of any service. It is a beautiful Sunday morning, and we hear rapid and continuous firing in the direction of Fort Blakely, from which we infer that the siege has begun there in earnest. This is the soldiers' method of praising God on Sunday. So many marches begin, so many battles are fought on that day. I am keeping close to the hospital. There is so much to be done there. I cannot burden my letters with the sad scenes every day witnessed, and I would fain forget what I have seen. Life would be brighter with the sad remembrance wiped out. There were 8 killed today in the 3rd Division of the 16th A. C. among them Captain Stitsen of the 33rd Wisconsin. In the 1st Division there were 4 killed.

*I have later, (1906), closely examined General Andrews History of this battle, and find no mention of this capture, which shows how utterly unreliable are accounts written on the field. I do find something of the capture of Capt. Starnes of the 7th Vermont with 20 men in the skirmish lines. It seems, however, that Steele's men did on the 31st capture an outpost 6 miles from Blakely and captured 100 men of the 49th Mississippi. No mention is made of the General officer and the paymaster with his \$400,000 scrip.

April 3rd, Monday

The siege continues with unabated fierceness. Our lines are gradually closing in on the doomed Fort, and the advances are by flank movements chiefly. Our men have advanced from their bomb-proofs to the 2nd parallel. Zig-Zag approaches are being dug. In some places our troops have reached the 3rd parallel. It is hard work and perilous. Today is the 9th day of the siege. Firing is kept up all night. *

April 4th

The fighting and advancing still goes (sic) on incessantly. Always, some [troops are] engaged, relieving each other by turns. Our advanced line is now within 100 yards of the salients of the Fort. The besieging army is now like a boa constrictor, tightening its folds around its victim. Thirty eight siege guns are brought into action against the doomed Fort. Amongst these are six 20 pounder rifled cannons, and sixteen mortars. The garrison would have been swept

*Have discovered that this locality has some memorable historic associations. Near here, during the War of 1812, Gen. [Andrew] Jackson made an encampment, and within two or three miles of the Fort (Gen. Jackson was then on his way to New Orleans) still stands the venerable tree under which he pitched his tent; and that was over 50 years ago. The tree is probably centuries old and, therefore, has two claims to respect. First, its venerable age, and second, its association with Gen. Jackson, who in the metaphorical style of his admirers in those far off days was himself styled a true being, familiarly and lovingly styled "Old Hickory" - And so it was that the "hickory" lay down under the "live oak" and slept in peace. Mixing metaphors in those days was as common as mixing drinks.

out of existence by this murderous fire had they not protected themselves by bomb-proofs such as ours. Some heaven born genius has invented a wooden mortar consisting of two pieces, one a stick of heavy wood nearly 12 inches square by 2 1/2 feet long and notched; and another round log about 16 inches long, in one end of which is a hole 4 or 5 inches extending half its length, and the ends are hooped by vein bands. This machine of destruction resembled somewhat: "The old oaken bucket, the vein bound bucket, that hung on the well." This wooden device can be carried along under shelter of the zig zag approaches till within a few yards of the Fort, and the gun part is fitted into the notch in the portable carriage, so as to point upwards in so nearly a vertical line; that a small charge of powder placed in it is enough to toss a six inch shell a few hundred feet in the air, and cause it to fall just inside the walls of the Fort. This is proving more effective than the long range metal guns. These bucket like mortars are so light that two men can carry the separate pieces wherever wanted. These shells are the more destructive in that they come unannounced by deafening roar, and make no sound on the fall.

April 5th

One day is much like another, and all are full of the most intense excitement and anxiety. Is there no relaxation? no rest? yes, by which I mean that there is. The soldier must have both. He cannot pass all his time fighting, and so when his turn comes he creeps back into his bomb-proof or casement where he is safe from the venomous sting of the minie bullet or the bursting of shells, and spends his hours of safety in a game of cards, or indulges in a quiet smoke, or prepares his repast of pork, beans, and hard tack and coffee, or such other viands as he may have at



"How dear to our hearts
are those old oaken mortars,
Those vein bound mortars,
when loaded with shell."

hand and last of all, on the bunk in his half subterranean shelter "He lays him down in peace to sleep" and none of the hellish noise of the unceasing battle disturbs him, and to be roused only till the bugle call to duty shall rouse him.

Even so, according to the earlier belief of the Christian, shall mango to his last sleep in the shelter of his grave; and rest in peace till the trumpet of the resurrection shall sound and awaken him to a new life. And this is the 10th day of the siege. Yesterday, [U. S. S.] Octorara, which seems to be always getting aground on a sand bar, and getting off again, swung clear of its bar, and resumed its heavy firing on the Spanish Fort by which it appears that this unhappy fortress is beset upon all sides, and can have no hope of escape. There can be but one end to the struggle, and that is surrender.

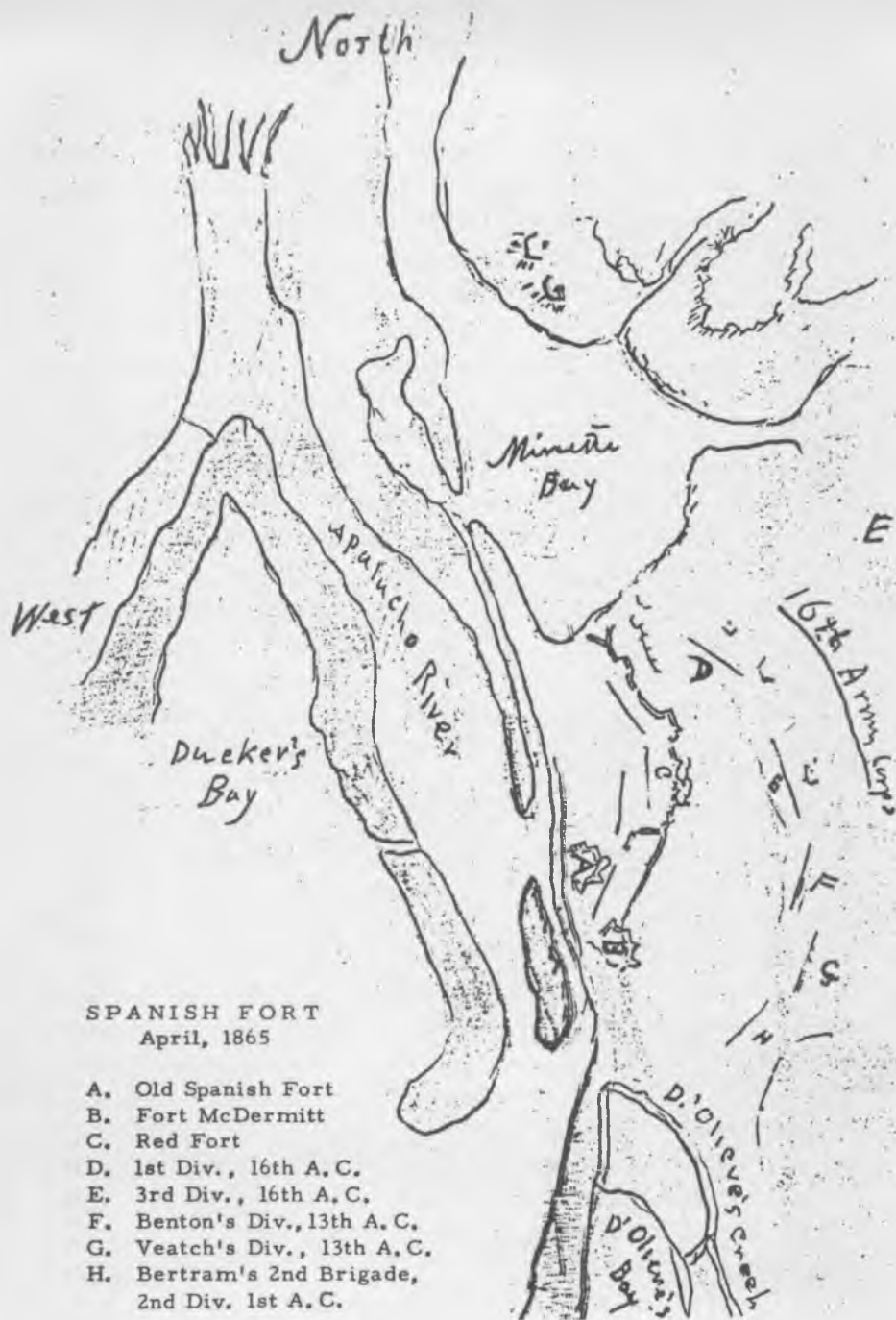
Word had come to the besieged that [Confederate General Nathan Bedford] Forrest was to assist them. By his aid they had hoped that the tide of battle would be turned and the siege lifted, whatever that may mean; but word has reached them also that Selma has fallen into the hands of [General James] Wilson's cavalry, and by this adverse stroke of fortune the coming of Forrest to the rescue has been hopelessly delayed, and the besieged are discouraged and the end seems close at hand. Some of the more ambitious officers are anxious for a charge upon the batteries and a quick ending of the siege, but wiser and more humane counsels prevail. The loss of life in this remarkably cautious siege is comparatively small, and this is a good set off against the glory gained by a charge along the entire line, with a possible fearful loss of life. They will be just as certainly ours in the end with a smaller loss of life. --(and fewer promotions amongst the higher officers).

Thursday, April 6th, 1865

This is the 11th day of the siege, and there is nothing new that we know of. I have kept pretty close to the Hospital with the other chaplains and the surgeons and attendants. So many are disengaged at this point that the wounded can be brought in by their comrades not in the fighting line. Were there a battle or a charge, my place would be to superintend the bringing in the wounded by the ambulance corps. For some cause, the artillery fire has slackened considerably today. Work went on as usual in the trenches. There were but one killed and 8 wounded in the 16th A.C. There was some suspicion that the Fort was being evacuated, at least, in part, as preliminary to a surrender, but a reconnaissance made tonight by Lieut. [Jules] Capon of the 9th Minnesota, found the enemy still holding the Fort in force. We believe, nevertheless, that something of the kind is on foot.

Friday, April 7th, 12th day

Yesterday, our navy steamed up and cast anchor about 2 1/2 miles from Spanish Fort, but could not work to advantage on the walls because our lines were established so close to them; but today, the Octorara having secured a more favorable position, opened fire. Meanwhile, our besiegers are closer to the walls and strengthening their position as they advance. It is confidently predicted that tomorrow the drama will end and the curtain fall upon the closing scene. And what then? It will be "Off to Blakely." This seems the more likely, because on yesterday one of our batteries ([Captain William] Wimmer's) was sent forward to Blakely. All the wounded capable of being removed are sent by steamers to New Orleans, and there will soon be left here only the dying and the dead, and the latter are buried almost immediately in graves marked for future identification.



Saturday, April 8th, Capture of the Fort

It was estimated that there were 2,000 Confederates inside of Spanish Fort, supposing that none have escaped, (sic) originally supposed to be nearly 3,000. It was invested by the Army of the West Mississippi, Major Gen. [E. R. S.] Canby commanding. This army consisted of the 16th Army Corps with its 3 Divisions, Gen. A. J. Smith commanding. The works, known collectively as Spanish Fort, consisted of a curved line of entrenchments over a mile long, extending from the banks of Minette Bay (north) on the east shore of Mobile Bay and about 7 miles below Mobile, to a point near the mouth of D. Olieve's Creek on the south. Included in and within its lines [were] stronger and more elaborate defenses known as the Red Fort, Fort McDermitt, and Old Spanish Fort.

The foregoing map will, at least partially, explain the general plan of the Fort and the position of the besieging army, without claiming accuracy for any particular day, for there were some changes as the lines closed in. The Navy besieging from the west is too far off to be included. The number of the besieging army was about 30,000 men, a number greatly in advance of the enemy within the Fort, or chain of forts, rather. Some of the boys irreverently likened it to a coon hunt on a grand scale, in which the cannons and mortars are the barking dogs, and the most striking resemblance lay in the fact that the enemy was tired and could not escape. A new 100 pounder parrot gun (1st Indiana) was put in the Minette Bay Battery and that with the 100 pounder from the Octorara made music loud and deep.

About 5 o'clock in the afternoon, these two guns (in fact all the hounds in the pack) commenced baying at once, which produced in conjunction with the guns in the Fort, a most terrific effect. No thunderstorm ever produced a more sublime effect. Well did we

know what it meant. There had been a similar prelude to the grand echelon charge at the battle of Nashville on the afternoon of the 2nd day. It meant a charge in which the opposing armies should grapple in a hand to hand death conflict. I was in the Hospital at the time but knew by the awful roar that the crisis of the long siege was at hand. The wounded were brought in from time to time. We had assurances of the progress of the battle, which was continued till midnight when the remnant of the heroic defenders of the Fort, all that was left of them surrendered, only 500 men. "All that was left of them, left of 2,000." We learned later that the rest of them, of those not slain, to the number of near 1,500 had escaped safely under cover of the darkness, and were on their way to Mobile, or what is more likely to reinforce the wearied defenses of Fort Blakely, which has been under siege since April 2nd. This has proven something of a damper, distracting that much from the glory of the victory, some claim that the final attack should be in the morning. In that case the entire garrison could have been captured, as they could not have escaped in the day time. On the other hand, there would have been a greater loss of life to the besiegers, and it would be good tactics to allow a part of the garrison to escape, since worn out and wearied, as they were, they could give no adequate support to the defenders of Blakely; and with Spanish Fort captured and Fort Blakely in its last struggle, they could have no use for them in Mobile, as that city with both these forts taken, could not hold out an hour. The defeat would annihilate them as soldiers whether taken prisoners or allowed to escape. The old adage that "He who fights and runs away, may live to fight another day," is not true in practice. "He that fights and runs away, is more apt to run away in the next fight." He has found out the path of safety and is spoiled as a fighter.



Union bomb proofs in front of Spanish Fort during the siege.

Then, besides, there is an economical view of the question that appeals to the valiant men in the commissary department. We have to feed our captives, while those that run away must feed themselves, and so far impoverish the government they were paid to defend. Is it not better that these 1,500 hungry defenders of the Confederacy should be allowed to escape, that they may be a source of expense and demoralization to their government and to their comrades?

The charge made at 5 p. m. was somewhat analogous to the echelon charge made on the 2nd day of the battle of Nashville, as it was made without the order of the commanding officer. Gen. Canby had intended to make the assault on the works in the morning of the next day. The corps commanders, however, claimed authority to act under a permissive order in the form of instructions as the commander issued at the commencement of the siege, "not charge, unless in their judgement, they had the assurance of successful and decisive results." This they certainly had, but Gen. Canby preferred an assault in the morning and had said so, and the question as to who was right is an open one. (The comments on this page were inserted in the diary at a much later period and are based upon official reports and comments in Gen. [Christopher Columbus] Andrew's History of the Mobile Campaign).

Note - added June 5, 1906

The above drawing is rudely copied from an engraving in Gen. Andrew's Campaign of Mobile, and is a fair representation of the bomb proofs constructed by our men in the front of Spanish Fort during the siege. Capt. [Theodore G.] Carter of Co. K. of the 7th Minn., who visited the ground in 1902 nearly 40 years after the battle, reports the fortifications in ruin and overgrown with pines.

Sunday, April 9th, 1865

The 7th Regiment with some others went into the Fort at the time of the surrender, and remained there till morning. Much of our artillery is being sent on to Blakely, (5 miles) and we expect to follow and take part in the siege, but the chances are that it will surrender before we get there. The 2nd Division has been there throughout. So part of their glory is ours. In the morning, the prisoners, 500 in number, were marched out of the Fort, to the tune of Yankee Doodle, and into, or through, our camp, and through a sort of grim facetiousness, were made to pass between a double line of our wooden mortars, the sight of which kindled their wrath and resentment, and I grieve to say, they were terribly profane at the sight. It would have been a gracious thing to have spared them this humiliation, for they had fought heroically, 4,000 against 30,000 men, and kept them at bay for 13 days, and but for those cheap green tree mortars, might have held out longer. Really, there was not much cause for exaltation on our part. At 9 a. m. we were on our way to Blakely and arrived in a few hours, after a very carefully picking of our way over ground supposed to be sown with torpedoes, and eternal vigilance was the price of safety. We arrived in time to participate in the capture, but I suppose were not needed and were ordered into camp about 3 miles away, but not in sight. We were, however, in sight of Forts Huger and Tracy [which were] some distance out in the bay belching fire and smoke, resembling as much as anything else, the low crested crater of submarine volcanoes in eruption. Our artillery was replying from 5 points on the shore, one near Blakely and the others extending down the Bay as far as Spanish Fort. There were two of our gunboats on the Bay directing their fire upon the Forts, and apparently doing some good execution. The cross firing from so many dif-

ferent points was incessant and preplexing. Many of the shots seemed, however, to fall short, some of them skipping or ricocheting along the surface of the water and sinking before reaching their destination. Some struck upon the sand embankment of the Forts and raised great clouds of dust. This may have been caused by the bursting of shells. Sometimes a shell exploded in the water, in which case it would send up a column of spray from 60 to 100 feet high. But many exploded in the air forming a globular puff of smoke with a dark opening in the center.

We could easily estimate the distance of the batteries by counting the seconds occurring between the flash and the report, and multiplying that number of seconds into the number of feet that sound travels per second. These batteries were 3 miles distant. By a careful timing of intervals between flash and report, the soldier learns how to dodge cannon balls and even bullets. The island batteries were sometimes completely enveloped in smoke. Still the flash of the guns could be seen as a faint lurid spot. I was standing on the edge of a bluff or hill, perhaps 40 feet over the surface of the Bay with a few officers for the time off duty, and watching the artillery firing. On the parapet of Tracy stood a heroic form that evoked our admiration. He seemed to be a sentinel, and stood motionless in all the uproar of the conflict. Shells burst over him and around him, and when the smoke cleared away there he stood in the same defiant position. At the approach of shells others scampered and hid themselves. He alone defied them. I felt a genuine respect for this brave defender of the Southern cause, till he was revealed by a field glass, which one of the officers loaned me, as a wooden post about 6 feet high, with some kind of a garment thrown over it, and no more human than a scarecrow in a garden.

Wednesday, April 12, '65

The great event of last Sunday night was the capture of Fort Blakely with all its garrison and stores. The fall of Spanish Fort the day before, doubtless accelerated the surrender of Blakely. The garrison had heard the awful uproar of the cannonading that preceded the charge and knew what it meant. They knew, too, that the result would be the doubling of the besieging force, by the late besiegers of the Spanish Fort or apprehended it rather. (sic) The troops were not needed, but the artillery was called into service and 8 or 10 more siege guns were placed in an effective position. As at Nashville and Spanish Fort, the call for final assault was made in the late afternoon, at Blakely at 5:30 p. m. The details of this engagement I cannot give except at 2nd hand and they are yet conflicting; but there were 16,000 men engaged in the assault, the lines were 3 miles in length, and their advance was nearly simultaneous. The casualties of the Union forces were about 127 killed and 527 wounded. The garrison did not escape, or any part of them as at Spanish Fort, but with a few exceptions were captured. The Confederates had a few boats in the stream and a few attempted to swim to them. The fugitives from Spanish Fort had much better opportunities for escape, and freer access to their boats, and they could escape either to Mobile or to Blakely. The garrison at Blakely had no place of refuge but Mobile, and with Blakely captured Mobile would at once fall into the hands of Canby's men, and the war in this section, at least, would be ended. But although the land forts had been captured, those in the Bay, Forts Huger and Tracy, are still keeping up the unequal contest, and shelling our land batteries and gunboats incessantly. Yesterday afternoon, I went down to the shore and witnessed the artillery duel which is still carried on. I returned today and made the sketches on pages 24, 25, and 26. My eye was

then charmed more by the framing of the picture, a framing given by nature, than by the picture itself. The foreground was set thick with flowering bushes, such as the wild buckeye with its panicle of crimson, a true flower of war flaunting its bloody flag. There was an undergrowth of less showy flowers, purple and yellow and white, among the fleurdelis. On the right and left of the picture, and weaving their rugged branches overhead stood some tall pines, their limbs draped in silver grey, or greyish green, Spanish moss. Through the oval opening within this natural frame, the waters of the Bay lay gleaming silvery in the afternoon sunlight, with the two hostile forts, belching cloud and flame like volcanoes in eruption. I have not heard of any damage they have inflicted on sea or shore, and it seems to me altogether spectacular and unreal, something like a pyrotechnical show on the 4th of July! Possibly they are making all this noise to cover an evacuation of the forts; or possibly it is a device to get rid of all their heavy ammunition which they cannot take with them on their retreat, and so prevent it [from] falling into the hands of Uncle Sam. It may be that the lavish throwing away of their ammunition is a sign of rejoicing that "this cruel war" is nearly over.

I stood alone on the spot where I stood yesterday and after making my sketch went down to the base of the hill to make another from near the water level, and had nearly completed it when a roar like the heaviestthunder peal almost stunned me. At this same instant a cataract or avalanche of dew white smoke came pouring down the side of the hill to the place where I sat sketching.*

*NOTE. June 9th, 1906 - 40 years later I visited Mobile and partically explored the eastern side of the bay with the hope of finding this place and finishing my sketch, but could not find it.



Union and Confederate artillery duel framed by nature.

Rightly conjecturing that this was one of our hundred pound guns, masked behind the trees on the top of the hill to play upon Fort Huger, and considering that I was in no danger, I for a while went on with my sketch. Unfortunately for me, the smoke at that point on the shore revealed to the gunners in the Fort the position of the masked gun, and their fire was directed immediately towards it; but the first shot fell short and plunged into the water about a mile from the Fort. A second shot immediately followed and struck the water at least a half mile farther in, but ricocheted like a flat rock over the surface and after several rebounds, sending up at each impact a cloud of spray, finally sank, not a half mile distant from the place where I sat. I had not thought to draw the fire of the Fort, and so gathered up my portfolio, and made an inglorious retreat, not up the hill, for that would have kept me in the vertical range, but down the shore for about 40 rods, thence up the hill, running at my best speed toward the camp. I was right, the shot that I ran from, struck the base of the hill at the water's edge a few paces from my seat. The next shot passed over my head, one of them striking a tree near the top. My path to the camp had led me across the vertical range of the gun. Men were everywhere running wildly to get out of range. At last I heard the hurtling of a shell above me. Obeying some instinctive impulse - for I had not time to reason - I dropped to the ground face downward at the very moment of its explosion. Recovering my senses I rose and saw a soldier lying face upon the ground a few feet away, apparently dead. I approached him and touched him on the shoulder. No sign of life. I then pulled him with a view of turning his face towards me for purpose of recognition. He opened his eyes, and after looking around him for a moment as if awakening from sleep, he inquired what all this meant? When I told him, he sprang to his feet

and fell into a fit of the most meaningless (sic) fit of swearing to which I ever listened. I went off and left him swearing - Such are the demoralizing effects of cannonading. The man had been rendered senseless by the mere sound of a shell bursting above him.

As our camp was directly in the line of this artillery practice, I felt considerable apprehension for its safety, but found on my arrival that it had been moved to another place quite out of range. I found the camp in a great uproar over news that "Lee had evacuated Richmond."

Men and officers ran wild and threw up their hats and cheered and embraced each other, and I wondered till I learned the cause, if they were all drunk. Then came news that our troops - part of them had - marched into Mobile and quietly taken possession of the city. It is said that the 13th Corps under Gen. Gordon Grainger is to be the army of occupation. So our hopes are dashed, and we shall see nothing more of Mobile than [what] we have seen across the waters of the Bay at a distance of from 6 to 7 miles. Yesterday, (this is the 12th) Mobile was evacuated, its garrison of 4 or 5,000 soldiers not being sufficient for its defense. They have gone to Meridian. The 3rd Div. of Grainger's command followed them to Whistler's Station almost within [the] city limits, and gave them a few farewell shots, and so the campaign against Mobile is ended.

HISTORY OF HUNTSVILLE

WATER WORKS

BY Frank Wilson

By virtue of its establishment in 1823, the Huntsville Water Works has the distinction of being the oldest public water system in the United States west of the Appalachians. Drawing water from the Big Spring, and in recent years from other sources, the system has served Huntsville continuously for 150 years.

1823-1836

The earliest record on the water works was made on February 15, 1823. On that day Hunter Peel, an English civil engineer who came to Huntsville in 1816, executed an agreement with the Board of Trustees to furnish the town with water. Peel believed that a water system with a reservoir of water on the public square would serve two purposes. It would be of great convenience for public use and it would also greatly improve the town's ability to fight fires.

As set forth in the contract, Peel was to supply residents "with good spring water to be conveyed in hydrants into a reservoir on the public square." Under the franchise Peel was given exclusive right to convey the water "provided always that he shall within one year from this date cause good spring water to be conveyed in strong hydrants (cedar log conduits) iron

bound at their juncture, to a waterproof reservoir of good thick plant, containing at least 1,000 cubic feet (7,500 gallons) to be by him built on the public square of said town."

Leroy Pope, original purchaser of much of the land on which Huntsville was located, owned the Big Spring. On April 14, 1823, Pope executed a contract with Peel granting him the right to erect a dam across the stream from the spring and to construct there a house "not exceeding thirty feet long by twenty-four wide to house the water works." Peel, who was county engineer at the time, formed a partnership with James Barclay, a machinist, and Huntsville's first water works was under way.

Peel and Barclay's first water plant consisted of an awkward looking wooden self-propelled turbine wheel turned by the spring flow which pumped water through cedar log pipes to the reservoir on the Square.

The first cedar log pipes used were very crude. They were up to fourteen feet in length and how they were hollowed out is still a mystery. The cedar pipes apparently used after 1827 were all bored with an auger.

Peel and Barclay apparently experienced difficulties in keeping the system operating and there were extended periods when the reservoir remained empty. Dissatisfaction with Peel's operation resulted in his losing his franchise which was granted to a Joshua Cox in 1825. Cox's operation of the water works was no better than Peel's, and in 1826 he sold the system to Thomas A. Ronalds of New York. Ronalds hired Sam D. Morgan as supervisor and commenced a significant improvement of the facilities. These improvements included a new dam, engine house, new cedar log pipes, and a more powerful pump. In 1828, after much agitation, the town council contracted with Ronalds to construct, adjacent to the courthouse, a new larger reservoir at a cost of \$900. The new

reservoir was a wooden tank eighteen feet square and ten feet high, with a capacity of 24,300 gallons. It was enclosed by a two story brick structure, the upper portion of which was a meeting room for the town council. In addition to providing the new reservoir, Ronalds agreed to erect fire plugs at each corner of the public square "for the exclusive use of the fire engines of said town with three and one-half inch pipes (made from cedar logs) leading from the Reservoir thereto, such Fire Plugs are to be kept in such good order and repair that a plentiful supply of water can at all times be had therefrom for the extinguishments of Fire."

1836-1858

Ronalds and Morgan operated the water system until 1836. At that time, Dr. Thomas Fearn and his brother George Fearn, who was on the council, acquired the water works. In a contract executed with the Aldermen of Huntsville, Dr. Fearn and George Fearn agreed to completely rebuild the water system. The improvements included the installation of an iron pump at the spring and cast iron pipes 5" in diameter to the four corners of the public square. This marked the first use of cast iron pipe in the water system. The mayor and council agreed "to construct within five years, a reservoir upon some suitable site to be provided by them so as to admit an elevation of water therein forty feet above the surface of the public square." The reservoir was to be sixty feet by sixty feet and ten feet deep, and the city agreed to construct an iron main of 5" diameter to connect the reservoir to the water works pump at the Spring. In 1842, a new reservoir was constructed on a lot 150 feet square situated between Echols Street and McClung Street. The reservoir was dug ten feet deep and was seventy feet in

diameter. It had a capacity of 287,523 gallons of water. The elevation of the new reservoir and the new five inch main made possible a great expansion of the area which could be adequately served with water. In Dr. Fearn's Waterworks account book of 1842, were listed a total of 111 customers. In 1843, William W. Pope, who had acquired ownership of the Big Spring from his father, Leroy Pope, deeded it to the City for one dollar. In compliance with certain terms of the gift, the city embarked upon a beautification program of the property. William Frye's painting of the Big Spring area is said to have been inspired by the improvements made at the Spring.

Dr. Fearn continued to operate the water works and in 1854, the town council named a committee of three to inquire into the propriety of purchasing the water works from him. As a result of this study, in 1858, the city purchased the water works for the sum of \$10,000, to be paid in ten equal annual installments.

1859-1892

On July 1, 1859, an ordinance was adopted by the town council "to establish a tax for the use of water from the Water Works of the Town of Huntsville." The rates for residential users were based on the valuation of the house. "For each dwelling valued at no more than eight thousand dollars, the water tax shall be twelve dollars and fifty cents per annum." For commercial users, specific annual rates were set forth.

In 1860, the city constructed a new building to house the water works at the Spring. This masonry building with various alterations, including a smoke stack, served until a new pumping station was built nearby on Gallatin Street in 1899.

One of Huntsville's most exciting events took place in 1887, the opening of the famous Monte Sano Hotel.

One of the local newspapers, The Huntsville Independent, reported on May 26, 1887, that the work of connecting the Monte Sano Hotel with the city water works at the Big Spring was practically completed. A force pump was installed at the Spring and water was pumped up the mountain for the use of the hotel.

During the years of the Civil War and the Reconstruction days, there was very little expansion or improvement in the water system. However, by 1887 Huntsville was beginning to grow and it was apparent that the water system would have to be expanded and improved. After securing the permission of the state legislature, the city in March, 1887, sold \$15,000 in municipal bonds for the purpose of expanding the water system, and embarked on the greatest expansion program ever undertaken up to that time. The report of the water works inspector in 1889, gives an interesting accounting of the customers being served: 591 hydrants, 162 water closets, 63 baths, 24 urinals, 87 sprinklers, and 7 soda founts; a total of 934 services.

As part of the effort to attract a major new industry to Huntsville, the city in 1891, agreed to provide free 500,000 gallons of water per day for ten years to the Dallas Manufacturing Company.

The Huntsville Daily Mercury on December 21, 1892, had this comment:

The Board (of Aldermen) has now provided well for our citizens, and no more 'kicking' will be heard from patrons who have complained of being unable to get water early in the morning. The Chairman of the Water Works Committee was instructed to employ an extra man for work -- keeping the machinery (pump) at work constantly till the new standpipe is erected."

This incident pointed up the critical need for more storage capacity than the old dug reservoir of 1842 provided. Early in 1893 a new standpipe (reservoir) was erected on top of Echols Hill on land donated by

Colonel W. H. Echols. This new reservoir had a capacity of 600,000 gallons.

The increased pressure and volume of water provided by the major expansion in the 1890's made possible some interesting new uses of water from the system. At least one barber shop used a water motor for propelling the ceiling fans back and forth. A similar fan was used in the Monroe home on Greene Street. In 1904, the W. L. Halsey Grocery Company installed an elevator powered by water, and in 1813, the printing presses in the Monroe printing shop were water powered. These uses were economically feasible only because the water used was sold on a flat rate and not metered. The year 1898 brought civic attention to the need for beautification of the Big Spring area. After the old pump house was torn down, significant improvements were made in the appearance of the Spring area. The old dam was removed, the basin was widened, and the banks of the stream walled with white limestone. Three bridges were built and a fountain was installed in the basin at the head of the Spring.

The contamination of the water supply from the Spring first became a matter of concern in 1898, with an outbreak of typhoid fever. It resulted in the paving of the public square as a means of some protection to the underlying stream of water. After frequent typhoid outbreaks, the water department 1914 installed its first chlorinator. This was a very inefficient device and was of little value in purifying water pumped into the city's mains. In 1917, a severe outbreak of typhoid resulted in a survey by Dr. Carl A. Grote, Huntsville's first health officer. Open toilets located over rock crevices behind the old Market House located on the southwest corner of Clinton and Washington Streets were considered to be the cause of the pollution and a new sewer line was installed. An efficient drip-type chlorinator was installed in 1918,

after which typhoid resulting from contamination from the city's water system became virtually non-existent.

Although chlorination of the water had effectively eliminated the threat of typhoid, the fear of pollution of the water supply continued to be a source of concern to health authorities. In 1950, the city was ordered by the State Health Department to look for another source of water other than the Big Spring. After investigation by the Alabama and U. S. Geological Survey, it was determined that the Dallas Well and Lincoln Well, located about a mile northeast of the Big Spring, actually were tapping the same underground source, which fed the Big Spring. The two wells were acquired in 1955, and pumping from the Big Spring was discontinued in 1957.

An interesting economic aspect of the city's operation of the water system is the fact that for some thirty years prior to 1950, the revenues from the sale of water was the biggest single source of income for the city's general fund.

In 1954, as the city was faced with the need for tremendous modernization and expansion of the water system, it was decided to place the operation under a newly created Water Works Utility Board, thus ending ninety-six years of operation of the water system by the city council. Members of Huntsville Water Works Utility Board were appointed by the city council. It was at this time that the Water Department and the newly formed Natural Gas Department were placed under the direction of the General Manager of the Electric Department and the total operation became known as Huntsville Utilities.

By the early 1960's, because of Huntsville's enormous growth, it became apparent that sources other than wells must be used to meet the city's water needs. In 1964, a water purification plant was constructed near the Tennessee River. The plant which

was enlarged in 1967, can purify and pump into the city water system 18,000,000 gallons daily. By 1973, on the 150th anniversary of the establishment of this historic old water system, it had become one of the country's finest, with 652 miles of mains and a storage capacity of 32,000,000 gallons.

