

FROM SOLDIER BOYS.

Letter From Scott Telling of Their Last Days at Chickamauga.

ONWARD TO PORTO RICO

The 52nd Has Been Ordered to Porto Rico. The Boys are Enthusiastic to go And Wipe Out the Spanish.

CAMP THOMAS, CHICKAMAUGA, PARK, LITTLE, GA. Aug. 5 1898

TO REVIEW:

Dear Friends, I will drop you the last farewell letter, the last letter I will write from Chickamauga Park, but I will try and write you when we get quieted down in Porto Rico.

The boys are all excited and tickled to death because we are to get out of here. Last Monday our general, Gen. Wade, was called to Washington, D. C. He is commander of the second expedition to Porto Rico. He takes six brigades with him, and they are as follows: First Brigade, 1st Rhode Island, 4th Missouri, 22nd New York; Second Brigade, 1st North Carolina, 1st Alabama, 1st Arkansas; Third Brigade, 1st New Hampshire, 1st Vermont, 52 Iowa; Fourth Brigade, 1st New Jersey, 1st West Virginia; Fifth Brigade, 2d Texas, 1st Connecticut, 1st Delaware; Sixth Brigade, 1st Maine, 3d Tennessee, 1st Maryland. All together 18,000 troops.

We were the fourth to be paid off and fourth to leave for Newport News, Va. where we take the ship for San Juan, Porto Rico. We drew the rest of our mules and wagons this forenoon and 50 more drivers so that now we have our wagon train ready. We had the report last Saturday that we would be in Des Moines inside of a month, but I guess not yet.

Wednesday, August 5th the 3d battalion went up to Lytle, a mile away from camp, after Gov. Shaw and Adj. Gen. Byers, but they have not shown up. I guess they must have went on to Porto Rico to head us off, but the governor can't head off Uncle Sam's boys.

I heard today that the 51st Iowa was to go to the Philippines and the 49th and 50th at Jacksonville, Florida were going to Cuba this fall. Ha, ha, the old reliable 52d has the best place of them all if we only beat the rest home, which I think we will.

We are going down there, and take Porto Rico and then come home—just one day's work after we get there, if the old 52d gets a whack at the Spaniards. We are going to wipe the Spaniards off Porto Rico, peace or no peace. I hope we will not be ordered back like the 5th Illinois. They got started twice for there, and were ordered back, but finally got away.

It rains here the most of the time now, and we don't catch much drill.

The 2d battalion went out to the range Tuesday and got back today. We were alone with two battalions for four days. We send as high as 10 men from our company on guard a day. The 3d battalion won't get a chance to try their rifles, except on Spaniards.

The old brigade had a review yesterday before Brigade Gen. Maddock, of the 1st Maine, 1st Mississippi and 52 Iowa. Gen. Maddock will never get to review us again though.

We were mustered in for pay last Sunday morning. Brigade Gen. Maddock mustered us in. We had our arms and stood up in line, and when he called our names we stepped two paces to the front and came to order arms.

I was over to the 2d Nebraska last Sunday to see a friend of mine, John Marr. The 2d Nebraska is a fine regiment. They ought to go with us, for it is a well drilled regiment.

I was sitting in my tent yesterday morning after drill, and who should come up but Lonnie DeWolf, a son of Mr. DeWolf, who used to live in Denison. He is in the 1st Arkansas, Company F. He also goes with us to Porto Rico. He says the Denison boys look natural. He looked just the same to me. He wanted to see Gov. Shaw when he came.

Company D has a pancake stand. The cakes taste good. They say they are going to take it along with them and feed us on cakes in San Juan. They sell two for 5cts, but they are good just the same.

I hear the 51st has a great many sick, well, so have we. If we stay here long we will not have any to drill. We lost another man in Co. G the other day with typhoid fever.

They say there is only 80 in a company going. Capt. Ringling, of Co. I has been sick a week, he has a furlough for thirty days to go home, and there are many of the sick who are getting furloughs home.

Private F. Gleason, of our company, who has been sick ever since we have been here, is discharged with a pension. He was a pretty sick boy with typhoid pneumonia.

Private E. Cross, who was transferred to the signal corps, 1st Corps, which left a short time ago for Porto Rico, got as far as Newport News and was thrown out. He couldn't stand it there.

Comrade Gene Justice, who has been on the sick list for two weeks, is again back in the ranks. He says he thinks he will be able to send a Spanish scalp to Denison yet. He is just crazy to get to Porto Rico, but he says he doesn't want any garrison duty in his line.

Company M has a possum. He is a funny looking animal. They also have a chicken they call Maugy, after Chickamauga Park.

Company G has a fine store they are selling out at cost. They are going to remove to San Juan, Porto Rico, and put in a larger stock of goods.

Our drill expires in Chickamauga Park tomorrow morning, and the boys are glad of it.

I bid you one and all a farewell goodbye. Be sure and have a good fat turkey for us Christmas. We expect to be home and take Christmas dinner with you. I will write you again when I get settled down in my new home in Porto Rico.

Yours Truly,
Wm. J. Scott.

The schoolma'ams are taking examinations to day.

Rev. Igen Fritz is visiting at Stuart, Iowa this week.

Wm. Brown, of Dunlap, is helping in the Denison art gallery.

Prof. Holst, one of the instructors of the Institute, returned to Boone last night.

Miss Fay and Master Carl Ainsworth of Omaha are the guests of Miss Alice Wilson.

Mrs. C. P. Socking came up from Omaha last evening. The message sent by wire informing her of the death of Mr. Dunbar having been received too late, she did not arrive in time for the funeral.

DIED.

At his home in the north part of Denison, Mr. Hans Jansen passed from this world at two o'clock this morning, August 12, 1898. Mr. Jansen is a native of Germany, having come to America and Crawford county in 1891—17 years ago. He leaves a wife and eight children, four of them step-children. The funeral will be held at the Lutheran church Sunday afternoon at two o'clock.

THE MARKETS.

Grain, Provisions, Etc.

Chicago, Aug. 11.

WHEAT—Moderate demand and easy.

WHEAT—Irregular. September, 67 5/8c; December, 67 3/4c.

CORN—Active and weak. Cash, 22 1/2c; September, 22 1/4c and 22 3/8c; December, 22 1/4c and 22 3/8c; May, 24 1/4c and 24 3/8c.

OATS—Lower. No. 2 cash, 21 1/4c; September, 20 3/4c; May, 23 1/4c and 23 3/8c.

RYE—Steady to firm for cash; deferred deliveries easy. No. 2 cash, 45 1/4c; No. 3, 43 1/4c and 44 1/4c; No. 4, 42 1/4c. September delivery, 41 1/4c.

BARY—Bells readily; market firm. Common for mixing quotable at 32 3/4c; common malting, 34 3/8c; good to choice, 36 3/4c, and fancy, 42 3/4c.

POTATOES—Weak. Illinois, Early Ohio and Minnesota, 40 3/4c; Kansas and Wisconsin, 38 3/4c; Home-grown sack stock, 1 1/2 bu., depending on quality, per bu., 50c.

EGGS—Quotably steady. Sales, losses off, cases returned, were made at 12c, and city recondiled, new white wood cases included, at 12 1/2c.

BUTTER—Market ruling steady. Creameries, 12 1/2c to 13 1/2c; dairies, 12 1/2c.

LIVE POULTRY—Steady and unchanged. Turkeys, 6 3/4c; Chickens, 5 1/2c; Ducks, 6 7/8c per pound; Geese, 43 1/2c to 45 1/2c.

WHISKY—Firm. Basis of 1 1/2 for finished goods.

New York, Aug. 11.

BUTTER—Firm. Western creamery, 14 1/2c; Elgin, 15c; factory, 11 1/2c.

EGGS—Steady. Western, 14 1/2c.

Live Stock.

Chicago, Aug. 11.

HOGS—Quality fair. Market active and feeling firm. Prices 67 1/2c higher. Sales ranged at \$2.85 to \$3.85 for Pigs; \$3.62 to \$3.74 for light; \$3.55 to \$3.76 for rough packing; \$3.70 to \$3.80 for mixed and \$3.80 to \$4.05 for heavy packing and shipping lots.

CATTLE—Quality was fair. Market moderately active and feeling steady. Prices unchanged. Quotations ranged at \$5.25 to \$5.50 for choice to extra Steers; \$4.65 to \$5.25 for good to choice do.; \$4.50 to \$4.75 for fair to good; \$4.20 to \$4.60 for common medium do.; \$4.00 to \$4.45 for butchers' Steers; \$4.25 to \$5.15 for 600 Western Steers; \$3.90 to \$4.30 for Stockers; \$4.20 to \$4.50 for Feeders; \$2.10 to \$2.25 for Cows; \$4.15 to \$4.80 for Feeders; \$2.70 to \$4.25 for Bulls, Oxen and Stags; \$3.60 to \$4.70 for Texas Steers, and \$4.50 to \$7.00 for Veal Calves.

DENISON MARKET SUMMARY.

Hogs	\$3 30/100 40
Wheat	30 1/2 50
Rye	30 1/2 32
Corn—70 lb.	21 1/2 23
Oats	18 1/2 19
Hay—Prairie	4 00/100 50
Hay—Timothy	6 50
Potatoes	3 75/100 40
Butter	11
Eggs	11
Cattle—Export	4 00/100 50
Cattle—1 1/2 year stock	2 50/100 75

The Same Old Plan.

Beyond question more mares have been bred this year than in any year since 1893. A good many of them have been bred to a very inferior class of horses, just as they were in the palmy days of horse breeding, when everything was bred and every stallion's book was full. Go into any locality in the country, and farmers will be found who are pursuing the same old plan—the plan that produced colts that went to market owing their breeders more than they brought. Some have learned the costly lesson, and large breeders have mostly learned it, but too many have failed to profit by their losses in the past. There will be no scarcity of scrub horses in the future, whatever may be true of other kinds.—National Stockman.

Buck Lambs.

We hear less kicking about buck lambs in market than of yore. This is not because the buyers think any more of the lambs, but because they get fewer of them. Still there are too many bucks, and those who ship them must not expect to get even wether prices for them. Buyers will not have them unless at a discount, and some will not take them at all. It will pay to castrate the buck lambs, and usually within ten days after they are dropped.

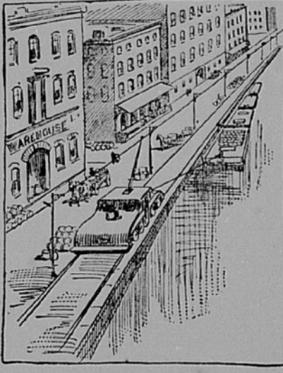
CANAL TRACTION.

An Ohio Canal to Be Operated by a Trolley.

In accordance with an act passed by the Ohio legislature, says the Cincinnati Commercial Tribune, W. G. Wagenhals, general manager of the Cincinnati and Miami Valley Traction company, operating an electric line between Dayton and Hamilton, has been granted the privilege by the state board of public works of experimenting on the Miami and Erie canal with an apparatus for driving boats by electricity. If the experiment proves a success, the agreement is that he is to have a franchise granting him the right to operate a line of boats for a term of years, paying to the state the tolls as are now paid by the owners of boats drawn by mules.

Mr. Wagenhals entertains no doubt as to the result of the experiment and is so thoroughly convinced of its success that he will, without delay, proceed to equip the Miami and Erie canal with a line of boats which will be drawn by an electric motor of special design. He says that four months and an expenditure of \$850,000 will be required to put the enterprise in operation and that he is already backed by an abundance of capital with which to push the work to an early completion.

Mr. Wagenhals' scheme in brief is to lay an ordinary standard gage track along the towpath of the canal, and by means of an electric motor, designed for this special work, and for which he has applied for a patent, to draw his boats in about the same manner as they are now slowly and tediously drawn by mules. The motor will be about four feet in height and will weigh in the



CANAL TROLLEY.

neighborhood of 30 tons. It will be geared to five different speeds, ranging from a quarter of a mile an hour to ten miles an hour, the lowest speed being necessary to give an easy start. The motor will have a trolley pole, the same as the electric street car, but in addition it will be provided with an electric shoe, which will take up the current from the conduit when it becomes impracticable to run the trolley, as in cases of passing beneath bridges and culverts along the line of the canal. The trolley wire will be suspended about 12 feet above the track, which will be ballasted and graveled to an even surface, so as not to interfere with the drawing of boats by mules. This will necessitate the widening of the towpath to at least ten feet.

Mr. Wagenhals says that it will require about 100 boats to equip the line between Dayton and Cincinnati. These boats will be constructed of steel, and so designed as to draw not more than one foot of water. Three power stations will be erected at equal distances between the two points named.

The motor which Mr. Wagenhals has designed to do the work will be of 100 horsepower, and will, he says, pull with ease a train of at least five heavily laden boats, or more tonnage than a 300 horsepower engine can pull on rails, there being so much less friction to counteract the pulling strength.

German Experience With the Grip.

An extensive investigation as to the spread of the grip in the German army, assuming, as it did, the form of an epidemic, has given definiteness to medical opinion as to its being a disease that owes its origin to certain miasmatic external causes, while, on the other hand, there is not assumed to be any sure evidence of the influence of weather, climate, wind or soil or the season of the year. To the contrary, indeed, the number of those cases in which the spread and the mode of spreading of the ailment is attributable to human intercourse was considerably increased by the experience of the last epidemic. But authorities are still in a state of doubt as to whether the infection is carried directly from person to person or whether the infectious material is carried by the intervention of inanimate objects through the air. Of the real germ that causes the disease there is no precise knowledge. Reasons are given, however, for believing that inanimate substances may house the real germs of the disease and convey them far away, and if, therefore, dead substances can thus contribute to the spread of the disease germs such a fact may perhaps explain the appearance of the disease upon ships on the high seas.

Valuable Worms.

It is an old saying that we do not appreciate the worth of a thing until we have lost it. Possibly the worthy English farmers who own the large tract of land in Essex which was in November last flooded by salt water, owing to the break down of a sea wall, think of this adage when they ruefully look at their sodden ground. The despised worms, by their constant burrowings, kept the land well drained, but when the sea flood came they were all killed, and the land had a great feat. That land, measuring about 50,000 acres, is still in a spongy state, and is likely to remain so until the farmers' friends—the worms—have time to recover their lost position.—New York Times.

HOW ALUMINIUM IS MADE.

It Is Now About as Cheap as Brass, Bulk For Bulk.

Aluminium is now made about as cheap as brass, bulk for bulk, but not pound for pound, for aluminium is very light, its specific gravity being only about one-third that of iron. Native aluminium is found in clay and in a state of silicate, as in felspar. It is found in great quantities in southern Georgia, mixed with red oxide of iron. It is the alumina there which is the oxide of aluminium. When separated from other substances, alumina is a white powder. Electricity is the chief factor in the production of metallic aluminium. The powdered alumina is placed in vats lined with carbon. The description of the process is as follows:

Immediately over the vat is constructed a metal framework, through which are inserted a large number of carbon rods about 18 or 20 inches long and from 2 to 2 1/2 inches in diameter. This framework is insulated electrically from the iron crucibles. The framework and the carbons are connected with the positive conductor of the electric current and the vat or crucible with the negative.

These conductors are very large, something like a foot in width and an inch in thickness, and made of some good conductor of electricity. They have to be very large, because they carry a current equal to 3,050 horsepower. The current is one of great volume, but very low voltage, the electro motive force at each vat or crucible being only about seven volts.

As the process is electrolytic, and not simply a heating process, the direct current must be used, and therefore must be transformed twice—first, to bring it to a proper voltage, and, secondly, to change it from an alternating to a direct current. These iron vats or crucibles are connected up in series electrically, and then they are filled with the alumina and certain other materials, which act either as a flux or as a means of increasing the conductivity of the mixture. Just what this substance is is probably one of the secrets of the process. When all the crucibles are filled with the mixture, the current is turned on and kept on continuously night and day seven days in the week. All of the material in the different crucibles is heated to redness when the process of separation takes place. The oxygen of the alumina is thrown off as gas, and other residuum floats to the top of the crucible and is skimmed off.

Metallic aluminium in a melted state sinks to the bottom of the crucible, where it is dipped out from time to time with large iron ladles and poured into sand and molded into blocks similar to that of pig iron.

Aluminium is most useful as an alloy with other metals. It is being extensively used in many directions, and would be vastly more used except that up to date no satisfactory way has been discovered to solder it. In different compounds it is estimated that aluminium forms about one-twelfth of the crust of the earth.—Chicago Times-Herald.

New Textile Invention.

An Austrian inventor has succeeded in adapting photography and electricity to the laying out and application of designs in textile manufacture in a way which it is said will revolutionize this important branch of industry. By his novel method it is claimed that the work which has taken months or even years to complete can be accomplished in a quarter of an hour. This new electric loom will be exhibited for the first time at the Paris exhibition, where it will weave handkerchiefs. In three minutes the purchaser of these handkerchiefs will be photographed by an apparatus in the loom itself. The design plate will be prepared by the same machine, and in half an hour a silk handkerchief with the purchaser's portrait woven into it will be produced. At the jubilee exhibition now being held in Vienna small landscapes woven in silk, as well as portraits, are being shown. Mark Twain and Emperor Francis Joseph have had their portraits taken in this way.

Toxin Remedy Against Locusts.

There is a good deal for the farmer to think over in the story received from Mashonaland, Africa, of the efficacy of the toxin remedy against locusts. One farmer who procured a supply of locust toxin from the government says that as inoculated locusts died he kept and dried them, and afterward, having given the fungus time to mature, ground them into powder. A swarm of locusts which was two hours in passing went into a five-acre meadow patch, and some of the insects were saturated with a solution from the ground up powder and set loose again. In a couple of days the swarm was visibly affected, the locusts remaining stationary on the meadow stalks. A little later they were all dead, and the farmer declares that he has not a single locust on his whole farm. If the story is true, it points to an effective method of treating a long list of farmers' pests.

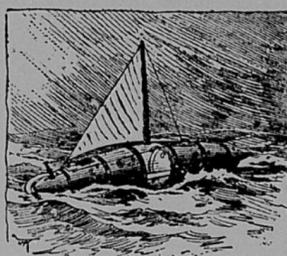
Novel Fire Engine.

Enthusiastic descriptions are given, according to the Philadelphia Record, of a new hand fire engine for use in suburban and country towns where the public service is not within easy call which has lately been brought out in England. This machine is portable, being mounted on a pair of strong iron wheels, and can pump some 50 gallons of water per minute against a head of 65 feet, or, when used in emergency, can be forced to deliver 100 gallons a minute. The engine rests on four iron feet, this position being effected by raising the handle of the carriage and lowering the boiler. It is of the quick raising steam type and may be run up to a working pressure in a few minutes, which for emergency work is of course of great importance. The pump can be disconnected readily.

NEW LIFEBOAT.

A Craft Which Will Right Itself When Upset.

The accompanying illustration represents a novel lifeboat which has been devised and patented by James Mitchell, Sr., of Arrow River, Manitoba, Canada. In general form the boat is cigar shaped, tapering from the middle to both ends, and is constructed either of metal or wood. The boat pictured in the engraving is formed of wooden staves, surrounded by hoops and strengthened from within by stout ribs. A large conical block at each end of the boat is provided with a passage or rope guideway, whose ends are at right angles to each other. A rope passes through these guideways, extends through the whole length of the boat, and is attached to a ship by the usual means. Within the body of each conical block and intersecting each rope guideway is a recess containing a spring pressed block. When the rope is removed, the block is automatically forced down so as to prevent the entrance of water. Should it be impossible to lower the boat in the or-



NEW LIFEBOAT.

inary way by letting out the suspending rope, it may be launched upon an even keel by severing the rope from within.

Hatchways for the entrance and exit of passengers, a rudder and steering ropes operated from the hatchways or from within the boat, are all provided. A heavy keel gives the boat stability and rights it, should it be overturned. Ventilating pipes are provided which can be closed by valves to prevent the entrance of water.—Scientific American.

Teeth and Health.

In late years more and more attention has been paid to the condition of the teeth of candidates for life insurance, and now the report of the dentist is considered of proportional value with that of the physician in determining the value of the "life." So important are the indications afforded by the teeth of the general health and strength of the constitution of candidates for the United States navy that unless a would-be cadet can pass a creditable examination at the hands of the dentist he must make up his mind to look for another calling. It is argued that if the teeth are not in good trim the digestion, and eventually, of course, the general health, and consequently the professional efficiency of the candidate must be impaired. These restrictions are now likely to extend to the army. One of the first signs of this movement is the announcement that a bill is to be passed to establish a dental corps in the United States army. It is proposed to make the army dentist a part of the medical corps, assigning one surgeon dentist, with the rank of major, to each brigade, and one surgeon dentist, with the rank of captain, to each regiment. The army dentists are to be graduates of reputable dental colleges. The teeth of the rank and file of the army are to be inspected periodically and kept in order, and the soldier himself is to be instructed how to second the efforts of the dentist.—Chicago Record.

Pharmaceutical Soaps.

The medical journals of Germany make mention of a new sulphur soap—thio-savonol—soluble in water. For the production of soaps of this character sulphurized oils are used. The thick liquid thio oil is made fluid with alcohol, and gradually mixed while being continually stirred with an equivalent volume of potash lye, which is likewise thinned with alcohol. The addition of large quantities of potash lye at one time produces separation of sulphur, but this danger becomes less toward the end of the saponification, and at last a small excess of potash lye is used. The fact that all the thio-savonol has saponified is indicated by the liquid appearing clear as a whole and a simple taken being clearly soluble in water as well as in alcohol. The excess of alkali is neutralized by volatile fatty acid. The soap solution thus obtained is freed from the alcohol in a steam bath and boiled down to the consistency of soft save, being occasionally tested for neutrality. Eighty-five parts of this soap are mixed with 15 parts of glycerin. The percentage of water in this mixture is 12 and that of thio-savonol of potassium is 5.

New Stanch For Blood Flowing.

An original and efficacious device for stopping the flow of blood has for some time been used by the Chinese—a method, it is stated, still entirely unknown to the medical fraternity of this country and Europe. The plan is to use sachets filled with charcoal powder obtained from straw, the application of these fine bags showing considerable advantage over the ordinary medicated gauze. The bags shape themselves perfectly over wounds and have a considerable absorbing power, while the cost is almost nothing. They can be made also wherever they are to be used and in a shape to suit each particular case, which is a fact of no little importance in using for field hospitals and surgical cases. In preparation clean straw is taken, placed in a large vat, put on fire and a cover which closes hermetically is placed on top. The combustion of the straw is slow and the product is, of course, aseptic—that is, devoid of microbes.



The Two Doors

The Rebel, the Tory and the Spy—A Tale of an Escape from New York in 1778

By CLINTON ROSS

This is one of a series of eight charming short stories, the exclusive publication rights of which we have secured for this territory. They are varied and interesting and by the best authors. This particular one details an exciting incident of the war of the revolution.



The Sergeant of the Guard

By P. Y. BLACK

A Story of Army Life

The war has taken possession of the country so thoroughly that war stories are in demand. We have purchased the above copyrighted illustrated story, together with seven others. There is another war story in the lot. They are all by well-known authors and will be well worth reading. The authors are

George Griffith
George H. Hepworth
Cutcliffe Hyne
Clinton Ross
Tom Gallon
Paul Kester
Cy Warman

The stories will be published in this paper from time to time.



This Illustration

Is taken from the story "Would You Be Young Again?" by George H. Hepworth. It is a very clever bit of imagining and we are sure it will be enjoyed by our readers. It is one of 4 series of eight short stories we have arranged to publish soon. The others are:

The Sergeant of the Guard
By P. Y. BLACK
The Finding of Diamond Pan
By GEORGE GRIFFITH
The Two Doors
By CLINTON ROSS
A Game of Quixotism
By TOM GALLON
Pirating of the Shah
By CUTCLIFFE HYNE
Mrs. Hearne's Chauvins
By PAUL KESTER
Wakalona
By CY WARMAN