VERMONT BOYS HOME.

The Regiment Arrived Late Sunday Afternoon and During the Evening at Fort Ethan Allen.

ONE DEATH DURING THE JOURNEY NORTH

Corporal Harry B. Lamson of Barre a Victim of Spinal Meningitis—Over 200 Sick Soldiers in the Hospital Train—Privates Frank McRea and Charles Reed of Company F and George Martin and Joseph Vollinger of Company I Not Expected to Live—Major Fillmore and Capt. Brownell Taken to the Mary Fletcher Hospital—Story of the Home-coming—Troops Moved to Camp Olympia Monday—Sec. Alger Writes a Letter to Chauncey Depew in Reply to Queries Concerning the Irregularities in the War Department—Speaks of the Enormous Work Accomplished and Says He is Not at all Responsible for the Terrible Suffering Which Has Been Experienced—Believed in Washington That the Terms of Surrender of Manila Will Have But Little Influence With the Peace Commission—Quiet in Spain.

Just three months ago Sunday the members of the Vermont regiment left Camp Olympia to defend the honor of their country. Their departure was witnessed by loved ones and strangers, all along the line to Chickamauga Park. Weeping mothers, fathers, sisters, brothers, wives and sweethearts gathered around firesides of gloom that evening, while the brave volunteers were speeding Southward to defend the stars and stripes. It was expected at that time that the boys would go to the front and to the front they wanted to go. As each day passed it added to the chain of anxiety and not until Sunday were the heavy hearts lifted and gladdened by the return of the ones they loved.

It was a few minutes past 1 o'clock Sunday afternoon that the first division of the regiment arrived in Burlington. When the engine whistled into the Fort the track was lined with friends. The train moved slowly and an air of sadness seemed to have locked the hearts of the crowd as no outburst of enthusiasm greeted the boys. Looks of expectancy were on the faces of the throng. The ambulance backed up to the train, stretchers were placed in position and the unloading of 214 sick men was begun. It was a sight that brought tears to the eyes of strong men and women wept as if their hearts would break. Some of the men were able to slowly alight from the train and with measured and unsteady steps they placed their feet on terra firma. Out of an original staff of 30 nurses 15 had been stricken with disease. The other 15 worked with a zeal and the lines in their faces showed plainly they had been put to a great strain. What were once healthy and fine looking specimens of manhood were but shadows. A large corps of young men from Burlington were on hand and with willing hands they assisted the nurses in taking the sick from the train. Typhoid fever had fastened itself upon some of the men and reduced them almost to skeletons. Mothers and fathers were not recognized by some while others were so weak they could hardly speak. Others were choked with emotion while those who were able to walk unassisted were joined either by friends or relatives. It took about an hour to unload the train but out of the 214 men only 21 were obliged to go to the hospital. The larger number were quartered in the barracks.

Among those in the hospital are the following:

WILLIAM RUST, Company E.
SHELDON S. CAMPBELL, Company B.
C. W. WYMAN, Company M.
J. H. FISH, Company E.
NELSON PICKERING, Company H.
J. D. CHALMERS, Company D.
JOHN McAULEY, Company D.
J. E. FITZGERALD, Company B.
FRANK McREA, Company E.
WARREN E. POTTER, Company A.
FRED MARTIN, Company K.
J. VOLLINGER, Company I.
CARL REED, Company F.
GEORGE MARTIN, Company L.
PEARL CLOUGH, Company F.
ISAAC FRASER, Company D.
D. O. BOOTH, Company H.
L. C. FULLER, Company D.
ROY BRUSH, Company B.

THE SERIOUSLY SICK.

Of the number in the hospital the following are not expected to live: Frank McRea of Company E, Charles Reed of Company F, George Martin of Company I, J. Vollinger of Company I. C. W. Wyman of Company M was taken quite ill just before Burlington was reached, but he is not considered in a serious condition. J. Hubbard Fish of Company E, whose home is in Hollowell, Maine, is in a serious condition. Hopes are entertained for his recovery, but it will be several months before he will be able to walk. The only physician on the train from Chickamauga was Dr. J. W. Jackson and he had every appearance of being worn out. He deserves great credit, for he has had but little sleep on the trip home. His assistants have been valiant and faithful and their kindnesses were without number.

DEATH ON THE TRIP.

The saddest event of the trip north was the death of Harry B. Lamson of Barre, a corporal of Company E. He was taken sick at Washington and was transferred to the hospital train. After an illness of 48 hours he died 14 miles north of Baltimore, the cause of his death being spinal meningitis. He was 25 years old and the favorite of his company. He graduated from Goddard seminary in the class of '91 and in June, '96, joined Company E. He was one of the most efficient officers in the regiment. The deceased was a brother of Mr. Lamson of the granite firm of Wells & Lamson of Barre and before he went to the front was the bookkeeper for the firm. He was a member of the Knights of Pythias of Barre and belonged to the uniform rank. The remains were placed in a casket at Jersey City and remained in the baggage car until Fort Ethan Allen was reached. Undertaker Roberts took charge of the remains, removing them to the basement of the hospital.

HOSPITAL SCENES.

The barracks were beseiged by anxious friends and relatives and handshakes, hugs and kisses were in order most of the afternoon and evening. In the large ward some of the men who were too weak to be up retired. Visitors kept coming and many looked long and steadily before they recognized what were once familiar faces. Some of the men whose faces were once round were pale and thin and their sunken eyes had a deep, mournful look. Those who were able to walk went to the canteen, where Caterer Coon served sandwiches, coffee and milk at the expense of the State. Private citizens also lined up to the counter and before the first division of troops arrived Mr. Coon had served over 2000 sandwiches and 250 gallons of coffee. Most of the supply was served to citizens, whom Mr. Coon had not prepared for. He realized that he could not let it continue and notified the officers who stopped it. Chaplain Day cared for the men at the barracks and much credit is due him for the able manner in which he cared for the commissary department of the hospital train. He telegraphed ahead for supplies. Beef tea, soups and malted milk were prepared on the train. Chaplain Day resigned his pastorate at Brattleboro. During his three months' service he has lost forty-five pounds. In fact nearly all of the men in the regiment have lost in weight with the exception of Lieut. Fuller of Company A of Rutland, who gained 21 pounds.

THE SICK.

List of the Soldiers on the Hospital Train.

COMPANY A, RUTLAND.

WARREN POTTER.
CARROLL DAVIS.
CHARLES LEWIS.
E. F. WILLIAMS.
FRED WHITE.
ALEXANDER HOLMKVEST
FRANCIS GUERTIN.
GEORGE LEVINE.
THOMAS HOGAN.

COMPANY B. ST. [illegible]

J. L. ROQUE.
WILLIAM MINOR.
J. E. FITZGERALD.
ROY BRUSH.
SHELDON CAMPBELL.
JAMES SHELDON.

COMPANY C. BRANDON.

GEORGE O'KEEFE.
THOMAS DUNN.
C. D. MYERS.
FRED NASH.
WILLIAM BUCKLEY.
F. F. HALPIE.
A. O. DURGY.
FRED PATNAUDE.
—— RICHARDS.
J. A. NUTTING.
THOMAS DUNN (furloughed at Rutland.)

COMPANY D. ST. JOHNSBURY.

ROBERT REAGAN.
JOHN McAULEY.
JOHN CHALMERS.
G. C. NEWTON.
L. C. FULLER.
BENJAMIN HEATH.
HARRY HUTCHINSON.
FRED CHALMERS.
R. W. GILBRAITH.
ISAAC FRASER.
MARK WIGGINS.
CHARLES GLEED.
PATRICK DEMARSH.
S. L. NELSON.
HAMILTON MORRILL.
G. L. McGREGOR.
FRED RIPLEY (corporal).
V. G. BROOKS (musician).
HARLEY SMITH.
ERBEN COOK (sergeant).
WILLIAM PATTERSON.
W. E. SMITH.
ORIN JAMESON.

COMPANY E. BARRE.

P. S. BOOTH.
J. H. FISH.
F. C. IVES.
W. E. FRASER.
WILLIAM RUST.
PAUL GLADCE.
JOHN THOMSON
FRANK McREA.
C. G. COCHRAN.
WILLIAM BURROUGH, Corporal.
HARRY LAMSON, died Aug. 20, 3:30 p. m., at Baltimore.

COMPANY F, NORTHFIELD.

WILLIAM COOK (musician.)
P. S. HOWES (corporal.)
GEORGE EVANS.
GEORGE RANDALL.
ALDEN ST. JOHN.
LEON SKINNER.
JASPER WILLIAMS.
PEARL GLOUGH.
H. R. CHADWICK.
W. C. MASON.
CHARLES LOOMIS.
H. P. HALL.
ROBERT SOPER.
CARL REED.
H. H. BROWN.
GEORGE SPAULDING.
FRED HOLDEN.
HARRY HILL.
VERNON ATKINS.

COMPANY G, BRADFORD.

NORMAN BARRIE.
DANIEL RUSSELL.
DAVID HOWARD.
CHARLES FRENCH.
A. PIKE.
G. B. CORLISS (Sergeant.)
J. A. BROCK.
H. W. COUTERMARSH.
WALTER LOUGEE.
RALPH BARKER.
DANIEL RUSSELL.

COMPANY H, MONTPELIER

OLIVER GISBORN.
ELMER TOWN.
SAMUEL WING.
FRANK JARY.
W. J. MOORE.
E. W. LYNTON.
ALFRED DUCELLE.
JERRY SULLIVAN.
WILLIAM DUFFY.
R. A. COOK.
E. S. PARMELLE.
D. O. BOOTH.
NELSON PICKERING.
C. G. SMITH.
HARVEY REED.
W. J. PUTNEY.
WILLIAM THERIAULT (Corporal.)

COMPANY I, BRATTLEBORO.

MICHAEL SHERRY.
JOHN LONG.
MICHAEL GUIHEEN.
ISAAC ROBB.
W. A. BELDEN.
GERALD KING.
PETER CUMMINGS.
J. C. HENKLE.
FRED DUSHAM
W. J. TAYLOR.
W. P. TOOMEY.
L. E. CUTLER.
ALEXANDER BINGHAM.
EUGENE WENTWORTH.
T. F. LYNCH.
M. J. LYNCH.
B. O. WARE.
GEORGE MARTIN.
JOSEPH VOLLENGER.
ARTHUR PIPER (corporal).
HERBERT SWIFT (corporal.
CARROLL BOYDEN.
HARLEY TAYLOR.
THOMAS GOLDEN.

COMPANY K. BENNINGTON.

ARTHUR CONWAY.
P. W. ROBINSON.
H. H. CLARK.
ROBERT MATTESON.
C. P. TITUS (musician).
GEORGE PELLERIN.
WILLIAM PENFIELD.
JAMES BARBER.
MICHAEL FRAHER.
CLAYTON THOMPSON.
MAX SEVERANCE.

COMPANY L. NEWPORT.

LAUD WRIGHT.
E. H. NUGENT.
R. E WILLEY.
J. A. HILAND.
NELVERT MYOTT.
H. A. LOUGEE (lieutenant.)
PERSON ROBBINS.
ORA JUDD.
ALLEN HOLBROOK.
ERNEST BEAN.
GEORGE MASON.
GEORGE CASWELL (sergeant.)
ARCHIBALD WELLS.
TRACY PHILLIPS (sergeant).
CHARLES WEBBER.
ALEXANDER BEATTIE.
ALBERT HEATH.
JOSEPH CORBETT.
M. J. RYAN.

COMPANY M. BURLINGTON.

JAMES FLYNN.
W. A. BARBER.
E. W. BECKWITH.
HARRY WELLS.
JOSEPH CAMPBELL.
GARDNER GATES.
E. J. LEE.
C. P. CLEVELAND.
WILLIAM HALE.
JOHN DUTLE.
DANIEL McGAUGHIAN, JR.
LUTHER FENNELL.
IRA E. AUSTIN.
CHARLES W. WYMAN.

The following are left in St. [illegible] Hospital at East Lake, Tenn.:

CAPT. H. B. CHAMBERLIN of Bradford, typhoid fever.
LIEUT. D. F. CURTIN, Brattleboro, typhoid fever.
LIEUT. CHARLES WILLIAMS, Newport, malarial fever.

MEN WILL BE FURLOUGHED.

As soon as the men are able to go home furloughs will be given them. Furloughs were granted Sunday to Edward Beckwith, William Barber, Harry Wells and Joseph Campbell. The four young men are members of Company M and reside in Burlington. Capt. C. M. Brownell of Company M was on the division which followed the hospital train and when the train arrived at Burlington he was taken off and driven to the Mary Fletcher hospital Major H. D. Fillmore of Bennington was also sent to the Mary Fletcher hospital Sunday evening.

The Fanny Allen hospital offered to take 15 cases and the doors of the Mary Fletcher hospital were cheerfully opened by Dr. Andrews.

FIRST BATTALION ARRIVES.

The events of the day were not all sad. The first battalion followed the hospital train, arriving at the Fort at 5:30 o'clock. At Burlington a large crowd of people assembled at the depot and cheer after cheer went up. Near Spaulding & Kimball's warehouse a large cannon was used in firing a salute. When the train came to a standstill at the Fort the sight was one worth witnessing. The boys in blue leaned out of the windows and shook hands with friends as they passed along. Many of the volunteers did not wait to get out of the doors, but crawled out of the windows. It was a cordial welcome home and the boys were glad to return. They visited the canteen and sat around in groups eating sandwiches and drinking coffee.

THE START FROM CHICKAMAUGA.

The regiment broke camp at 3:30 Friday morning. The sick were taken in ambulances to Lytle, Ga., three miles, and placed on the hospital train, which was the first to start for the north. The remainder of the regiment started at 6:30 on a nine-mile march to Rossville, reaching there at 9 o'clock. Stock and baggage were loaded and the train of 19 cars started at 9:30. Then at intervals of 40 minutes the three battalions left in as many trains.

At Washington Senator Proctor met the train and greeted many of the boys. The people of the capital also sent sandwiches and gave the troops an enthusiastic greeting. At Jersey City the section containing the baggage was delayed by an accident to the running gear of one of the cars and the third section passed the second section, leaving Jersey City at 5:30 Sunday morning via the West Shore road to Albany and the Delaware and Hudson to Rutland, which city was reached shortly after 2 o'clock Sunday afternoon. The people of Rutland supplied Co. A with lunches and the people of Brandon did the same for Co. C. The stations at Rutland and Brandon were filled with people who cheered the soldiers and at other stations on the Rutland road there were large gatherings.

THE HOME-COMING.

The third section of 19 cars, containing the baggage, tents, stores, 27 mules, 18 horses, 12 army wagons and 40 men in charge of Quartermaster Creed, arrived at Fort Ethan Allen at 10:15. The fourth section with the second battalion, Companies E of Barre, F of Northfield, H of Montpelier and I of Brattleboro, arrived at 11, and the fifth and last section, with Companies B of St. Albans, D of St. Johnsbury, G of Bradford and L of Newport, comprising the third battalion, arrived about midnight.

As the trains entered this city last evening a number of patriotic citizens sent up rockets and made liberal use of torpedoes along the track.

As the last section was passing through Saratoga Sunday night Frank Benoit of Company L, from Newport was struck, while standing or sitting on the car steps, by a guard of some kind and one hip was severely injured.

Quite a little band of black pickaninnies accompanied the stock and baggage train from the South and they seemed delighted with the trip.

THE FUTURE.

Dr. W. S. Webb's gift of $500, with more to follow if needed, has been much appreciated by the regiment, before leaving Chickamauga and on the journey home Chaplain Day has used considerable of the fund for supplies at different times for the sick and more will be used for delicacies in the hospital. A fund for the same purpose was also sent by some ladies in the southern part of the State.

The use of the riding hall was tendered the regiment for the night but the boys preferred to sleep under their shelter tents. Col. Clark, who has been at his home in Montpelier on sick leave, joined the regiment at Rutland and has assumed command. Reveille was sounded at 5 o'clock Monday morning and tents were pitched on the permanent camp ground, which is in splendid condition for the troops. Pure water, new company kitchens, a large storehouse and a hospital tent are ready for use.

PROMOTIONS IN THE REGIMENT.

The following promotions in the First Regiment are announced: Assistant Surgeon Hamilton to be surgeon, with rank of major, vice surgeon Lee, promoted to the medical staff, U. S. volunteers; second Assistant Jackson to be first assistant surgeon, with rank of captain; Hospital Steward Anderson to be second assistant surgeon with rank of lieutenant.

SEC. ALGER WRITES.

Washes His Hands of Any Responsibility for Suffering in the Army—Shows the Enormous Work Done.

New York, Aug. 21.—Chauncey M. Depew has received the following letter from the secretary of war and has consented to its publication. The letter which was written in reply to a request for information on the subject referred to is as follows:

War Department, Washington, Aug. 13.

My Dear Mr. Depew: The great pressure of business has up to now prevented me from sending to you the statement you were kind enough to ask for, as to what had been accomplished in the way of outfitting the army for the field, the conduct of campaign, etc. Also, the chiefs of divisions have been too much driven with work to compile the data required. Our people, not in the midst of the work can hardly realize what an undertaking it is to call 125,000 men into the field at one time, coming from all the States, and to have them mustered and gathered in camps on so short notice, and this too when we had scarce any camp outfit for their accommodation, all having to be provided for by the war department. As you know, when war was declared, there was no equipment whatever for the volunteers in store. That this was successfully accomplished, with very little accident, is a matter of record. Subsequent calls, including the regular army (which numbered about 27,000 men when war was declared) made a total of 268,500 men. To accomplish all in so short a time has been a great work.

Of course, gathering this vast number of men together, in a large measure under untrained regimental and company commanders for actual field duty—owing to the lack of knowledge as to sanitary conditions to be observed, the carelessness in not observing instructions which were furnished as to proper care of the men has added greatly to the work of the medical department. Thus from the homes of 216,000 volunteers has been constant and great anxiety as to what might happen to their soldier, and hundreds of inquiries made by letters and telegrams have been received every day concerning individual soldiers. The feeling on the part of these individuals that the war department is responsible for the care of their men individually has naturally aroused sympathy in case of sickness and death, and has created much sorrow. There is nothing young men in robust health are so prodigal as of their health, until it is gone. Men go into camp feeling that they can stand anything and everything, and cannot be made to believe to the contrary until stricken with disease.

Every effort has been made from the beginning to furnish every camp with all appliances asked for but of course the commanding officers in the field are the ones who have the direct charge of these men. For instance, one army corps commander has given orders and enforces them, respecting sanitary affairs and he has to-day but a fraction over 2 per cent on the sick list. Others have been less successful and the consequence is typhoid and other fevers have been bred and spread to a considerable extent. One regiment in the Chickamauga camp has a colonel who enforces sanitary rules in his regiment, obliging the men to boil all the water they drink, keeping the camp cleanly, and the result, less than 25 sick, and his camp, too, in as unfavorable a place as any in the command. Others more favorably situated have ten times that number on the sick list. One of the regiments of the last call, not yet removed from its State, sends bitter complaints of typhoid fever.

Concerning the Santiago campaign, when the ships left Tampa they had on board three months' provisions and an abundance of hospital supplies. They had lighters to unload with at point of debarkation. Three lighters were lost in severe storms on the way. As soon as were notified of the fact, two tows of lighters were sent from Mobile and New Orleans and one of these was wrecked. The army disembarked, getting off a portion of its supplies and medical stores, and immediately marched to the front to fight the Spaniards. The great difficulty of landing supplies was subsequently met. The wind sprang up every morning at 10 and made a high surf, rendering almost impossible the use of small boats with one lighter, which was all they had left for this purpose. Of the packers who were employed 50 per cent soon fell sick, and heavy rains falling every day, the roads (if they could be called such) became impassable for vehicles, pack animals had to be employed to carry food to the army, which being extended to the right around Santiago, increased the distance from the coast every day, and made the task more difficult. However, the result and the subsequent sickness that has broken out in the army showed the great wisdom of Gen. Shaffter in moving forward to make the attack while his men were in vigor. It was a movement bordering on audacity, but it succeeded and the persistence of the attack, I have no doubt, greatly disheartened the Spaniards. The result was one of the greatest victories for men engaged in modern warfare. The number of prisoners taken exceeded the attacking force by nearly two to one.

When yellow fever broke out and the fever list increased into the thousands it was for a time supposed that it was principally yellow fever. The bringing troops north at once after the surrender, under such conditions, would have been certain death to a vast number, but upon inquiry it was ascertained that very few of these cases comparatively were yellow fever, when it was at once decided to bring the army home as speedily as possible. Everything that human ingenuity could devise has been done to succor that army—not the ingenuity of the secretary of war, but the result of the combined counsel of those who have had a life-long experience in the field.

That some men have been neglected on transports coming home there is no doubt—all against positive orders, due perhaps to carelessness and negligence, but largely on account of not having the medical force to spare (many of whom were sick) from the camp at Santiago. Many medical officers sent with transports were taken ill on the way home.

To give you a little idea of the work that has been done, I append the following:

The work of the adjutant general's department has been to muster and order to their station, to be precise, 216,400 volunteers and 24,900 for the regular army. This with a reduced force, as many staff officers from all of the departments had been promoted and ordered to the field.

The chief of engineers reports an expenditure of $5,830,000 for harbor defences, building emplacements of heavy guns, mortar batteries and mines.

The surgeon general has had the enormous work of fitting up hospitals, organizing the medical corps, employing male and female nurses, contract surgeons, who are employed from civil life, besides those commissioned as corps, division and brigade surgeons, furnishing hands from all over the country and medical supplies and answering the de- from camps at Santiago, Porto Rico and Manila. The work done in this line is almost beyond comprehension.

The commissary general had purchased and distributed, up to Aug. 1, 110,907,225 pounds of rations which have been transported and distributed to all armies in the field here and at Santiago, Porto Rico and Manila, besides the large quantity distributed among the destitute Cubans.

The quartermaster general's report is too long to even give an approximate idea of his work. In the way of transportation to Honolulu, Manila, Santiago and Porto Rico, and return home there have been set 82,638 men, with artillery equipment and supplies. By rail in this country there have been transported 5,700 officers, 293,962 enlisted men, also 46,582 animals, besides thousands of wagons, artillery and and other quartermaster, commissary, ordnance, medical and signal service stores. The total number of articles of clothing and camp equipage distributed to the army by the quartermaster's department has been 6,274,183, of which I can only mention a few articles as follows: Blankets 288,730, blouses 283,762, trousers 906,423, hats 254,196, canvas field uniforms 83,230, shoes, pairs 511,372. Undershirts 798,875, tents 179,142, etc., etc.

The total weight of food and forage distributed daily to the army is approximately 900 tons.

Added to this is the large fleet of transports chartered and purchased, the management of the same in conveying supplies and ammunition.

The paymaster has promptly paid the army, and is deserving of very great credit for his work.

The signal corps has provided most efficient service, furnishing cable, telegraph, telephone and signal services to the different commands in the field.

If you had a day or two spare I would like to sandwich in a little work for you. I would like to send you these statements in detail, which I think would bewilder you, if anytaing can.

Sincerely yours,
R. A. ALGER.

Hon Chauncey M. Depew, New York.

M'KINLEY SENDS THANKS.

Washington, Aug. 21.—President McKinley to-night cabled to Admiral Dewey and Gen. Merritt the nation's congratulations upon their capture of Manila. The text of the despatch to Admiral Dewey is as follows:

Executive Mansion,
Washington, Aug. 21, '98.

Admiral Dewey, Manila:

"Receive for yourself and the officers, sailors and marines of your command my thanks and congratulations and those of the nation for the gallant conduct all have again so conspicuously displayed.

(Signed) WM. M'KINLEY."

Following is the text of the despatch to Gen. Merritt:

Executive Mansion,
Washington, Aug. 21, '98.

Major Gen. Merritt, U. S. A., Manila:

"In my own behalf and for the nation, I extend to you and the officers and men of your command sincere thanks and congratulations for the conspicuously gallant conduct displayed in your campaign.

(Signed) WM. M'KINLEY."

ABSOLUTELY QUIET IN SPAIN.

Madrid, Aug. 21.—Noon—Spain is absolutely quiet. Don Carlos has given his partisans strict orders not to commit acts of rebellion while the divisions among the republicans render that party powerless.

SUICIDE AT OGDENSBURG.

Ogdensburg, Aug. 21.—James Ashwood, a carter of this city aged 67 years, committed suicide at his home at 10 o'clock yesterday morning by slashing his throat with a razor. His daughter went to the barn about 10 o'clock for a wash boiler and found her father lying near the barn in a pool of blood, his throat cut from ear to ear and the jugular vein severed. Ashwood fell from his wagon several weeks ago sustaining quite serious injuries and has acted strangely since.

WILL CONTINUE THE WORK.

Malone, Aug. 21.—The special corporation election to appropriate $3,500 to continue concrete work of Main street resulted in a vote of 270 for to 147 against.

A MAN KILLED BY LIGHTNING.

Waterbury, Aug. 21.—During a severe thunderstorm to-day a man by the name of Swan of New Pedford, Mass., stopping at Burlington was out for a ride on his wheel and took refuge in a barn at Bolton which was struck by lightning killing Mr. Swan instantly.

CHICAGO'S GREAT CANAL.

A DRAINAGE SYSTEM WHICH IS ONE OF THE WONDERS OF THE WORLD.

Twenty-five Million Dollars Already Expended—Amount of Excavation Equal to Half of That of the Suez Canal—Nation's Share in the Project.

The audacity with which Chicago's great civic works have been planned and constructed has frequently startled the country. But few bolder projects, even in the World's Fair city, were ever undertaken than the turning of Chicago River backwards, and the pouring through it as part of a great drainage canal of 300,000 cubic feet of water per minute from Lake Michigan into the Mississippi. And yet this huge work is nearly completed, and at the engineer's office I was informed that by August, 1899, the big sewer will be in actual operation, says the Chicago correspondent of the Boston Transcript, who proceeds as follows: "Already $25,000,000 have been expended upon it, and some good sized bills and claims for damages are yet to be settled. Before the Nicaraguan canal is begun it may be well to see the final footings of the Chicago drainage, which must rank among the great artificial waterways of the world, and the peculiarity of it is that the corporation of a single city should have had the courage to assume the financial responsibility.

Nature helped the project enormously in making the watershed between Lake Michigan and the Mississippi basin at this point only eighteen feet above the lake level and but twelve miles out from Chicago. It is a remarkable geographical fact that the Great Lakes drain a relatively small area. Rarely is the watershed found more than fifty miles back from the shore. In Ravenna, O., forty miles south of Cleveland, there is a court house where the rainfall on the north side of the roof runs into Lake Erie, while that on the south side drains into the Ohio. In New York the sources of the Mohawk, which flows into the Hudson, are only a few miles from Lake Ontario. In Illinois the Illinois River heads close to Lake Michigan. The height of land north of Lake Superior is less than a hundred miles from that lake, and beyond the height the waters all flow to Hudson's Bay. No large river flows into the lakes, and the course of the small streams that empty into them is peculiar. Trace one of them on the map and you will find that only a few miles back from the lake it makes a sharp turn, and that its upper course is parallel to the lake shore. One of the largest of the lake affluents is the St. Louis River, which empties into the head of Lake Superior; but sixty or seventy miles from its mouth, in a flat, pine-covered country, are the lakes that form the sources of the Mississippi.

This characteristic of the lake country was nature's great concession to the canal project. For years the Chicago River has been a remarkably accommodating stream, flowing in times of floods and high water naturally into Lake Michigan, and at other times backwards toward the old Illinois and Michigan canal, which was designed to do on a small scale about the same thing as the new Drainage canal. But even if the land was level and the watershed near, it has been no holiday task to construct the great canal. In order to make room for the volume of water from the lake to to get through the city, the Chicago River has been dredged and deepened, in places widened, and in addition a "by-pass" has been constructed between Adams and Van Buren streets, which is simply a covered up river fifty feet wide, running under the property of the Pennsylvania Railroad company. This was made necessary because the natural stream was here so narrow that it could not well be deepened, and property was so valuable that they could not afford to widen it, and if the whole volume of water were to be drawn through the existing channel it would make a current so swift as to spoil the river for navigation. Outside the city the main channel, twenty-eight miles in length, may be divided into two parts, that through glacial drift, or ordinary earth, where the work has been comparatively easy, and so the dimensions of the canal fixed at the minimum requirements, and that through solid rock where the cost of an enlargement at any future time would be so great that a channel double the size which now seems necessary has wisely been cut. The part of the canal first described is 110 feet wide on the bottom, with "two on one" side slopes, while the rock excavation is 160 feet on the bottom, and through this part of the distance the work has cost $1,000,000 a mile. The channel will average 36 feet in depth, and when completed will be a free waterway navigable for any craft drawing less than 22 feet of water. The canal will empty into the Desplaines River at Joliet, and that river with another form the Illinois, a tributary of the Mississippi. But at Lockport, four miles from Joliet on the Chicago side, the real channel stops and there regulating works have been constructed and a bear-trap dam. From this point to Joliet the water will find its way by a tail-race, which is a surface stream carried by gravity between artificial embankments, for in that four miles there is a drop of thirty-five feet. Through Joliet and beyond the Desplaines is being considerably enlarged, and its banks diked to prevent serious overflows in the season when the river itself is high, and new movable bridges at many places have been necessary. This is, in brief, the problem of construction which has been met, and some figures may help to show the magnitude of the undertaking. Of glacial drift 27,000,000 cubic yards have been excavated, and of solid rock 12,000,000 cubic yards. This is half as much excavation as in the Suez Canal, which cost $100,000,000, and but slightly less excavation than in the celebrated Manchester Canal, which was six years in building and cost $77,000,000.

Two sorts of opposition arose to this great project from its earliest suggestion; the first on the theory that it would disturb the level of the lakes, whose harbors are now only too shallow, and the second that this stream of pollution would be a great detriment to the towns along the river below. Both of these objections have been in a measure met, so there is now little real hostility evinced toward the drainage canal in any quarter. But in 1895 the Vessel Owners' association appealed to the government for a scientific investigation to determine the effect on the lake levels that would result from taking 300,000 cubic feet per minute out of Lake Michigan and carrying it to the Mississippi. The report they made was rather inconclusive. At the drainage commissioner's office, however, it is asserted, and the testimony of great engineers cited in proof, that the level of Lake Michigan will not be reduced more than three to five inches by the loss of the amount of water contemplated.

Fortunately, nature has here too come to the rescue, for the lake levels, at one time a subject of serious apprehension, have now for two years been rising. In 1895 they were the lowest since 1867, and fear was general for the harbors, which are nearly all artificial, and none too good under most favorable conditions. At Chicago, Milwaukee, Cleveland and many minor ports they were made by the dredging out of small rivers and creeks. They were adapted in depth to the vessels in which the commerce of the lakes was originally transported, but the constant tendency toward increasing the size and draught of the craft has called for large harbor expenditures from year to year. Just at the time when the tendency toward larger sized lake craft began Chicago committed the folly of practising blockading her river near its mouth against deep draught vessels by building huge walls across it to accommodate by tunnels the street cars that run to the North Side and to the West Side. These tunnels have become a very serious barrier to the navigation of the stream. Large vessels cannot take a full load at the elevators and get out to the lake without scraping against the tunnel roofs, and unless some remedy can be found Chicago must cease to be a first class port. Several plans have been suggested, like the lowering of the tunnels, the removal of lake business to a new harbor at South Chicago, and what finally may be the solution of the difficulty, the conversion of a part of this drainage canal into a broad commercial channel, with wharf facilities on both sides. This would be one of the most expensive undertakings ever dreamed of, and no city except Chicago would think of it. But this canal project may, however, open the way to a solution of the harbor problem, with which it is intimately connected. The canal is not being constructed now as a commercial highway throughout its length although the cutting being made is sold to constitute nearly two-thirds of the entire cost of creating a channel from Chicago to the Mississippi which would be navigable to the largest boats able to ply between St. Louis and New Orleans. Chicagoans believe this is a beginning, and that the commercial highway will follow, either at the expense of the Federal government or the State of Illinois, or perhaps Chicago in conjunction with one or the other or with both.

The pollution problem has proved even less serious than that of harbor levels. At first, an Illinois Valley Protective Association was formed, and some endeavors made at Springfield to checkmate the drainage canal. But the Illinois Valley people soon saw that whatever its disadvantages the drainage canal would be of considerable value to them in furnishing a steady current of water in streams which had been periodically dry. The Desplaines has been almost dry during the summer months so that no town along its banks had made it a pools of water supply. This, too, was another piece of Chicago's good fortune. Then the oxygen of the air will greatly improve the quality of the stream after flowing thirty miles, and before it reaches St. Louis, 280 miles away, the harmful effects will have vanished; and then, as the entering wedge of what may become a great highway of commerce the people along the line are quite reconciled to some temporary inconveniences.

The value of the canal when once in operation to the water supply of Chicago cannot be overestimated. That now comes from four cribs, as they are called, located about four miles out into the lake, but even at that distance, in times when the Chicago River overflows, the pollution is quite serious. The canal is a gravity stream, and so the expense of maintenance when once completed will be little more than ordinary repairs and an occasional dredging.