

**CLEMSON'S TYPHOID EPIDEMIC.**

**Report of the State Board of Health Filed.**

In strange contrast to the statements made about the existence of the typhoid fever epidemic at Clemson college is the report given below, filed Wednesday with the governor by the committee of the State board of health asked by Governor Ellerbe to visit Clemson and investigate the cause.

Here is the report of the committee of the State board of health: To His Excellency, Governor Ellerbe: Dear Governor: Your committee has the honor to report that in obedience to your excellency's instructions we visited Clemson Agricultural college and investigated the cause and character of the prevailing sickness at that point, and nothing remains but to render to you officially the results of our examination.

Upon our arrival at Clemson on Tuesday, the 27th of June, we were waited upon by President Craighead and the faculty, who expressed much gratification at our arrival and an earnest desire to give us all possible aid in solving the serious problem by which they were confronted and which had excited painful apprehension throughout the State. It may not be inelegant to refer to the extremely picturesque appearance of Clemson college, crowning the graceful undulating hills and standing an enduring monument to its founders. With silent and irresistible eloquence in behalf of generations to come, who, sheltered in its beneficent arms, shall learn the lessons of stalwart, enlightened citizenship upon which our government must rely for peaceful, prosperous and happy perpetuity.

In advance of making a tour of sanitary inspection, we visited the hospital, in which there were a few patients, probably a dozen, some convalescing and others quite ill. We regretted the absence of Dr. Redfern, himself sick, probably with the prevailing fever, and we found Dr. Hardin in cheerful and efficient discharge of the duties of resident physician. We were informed that approximately between 70 and 80 cases of sickness had occurred among the students within a few weeks, necessitating the disbanding of the college. Of that number of fever cases, not more than 30 were of prolonged duration and several had died. The fever was thought to be malarial, but there were two cases in hospital, concerning which there was some doubt but might be typhoid fever.

As to the causation of this fever, various theories were entertained. One theory was that the students had bathed in the river near where the sewerage emptied. Another theory was that a number of students had worked in the low swamp lands, rich in alluvial deposits and had inhaled the noxious exhalations from stagnant water, the outflow of which had been recently checked by a dam. A third theory was that a large percentage of the students had come from their homes in malarial sections of the State, and that the latent malarial in them had developed by a higher latitude, by an excessive amount of work and the severe military discipline of the institution. That these causes had gradually devitalized the students, rendering them easy prey to sickness. The disproof of the first theory was that some of the sick students disclaimed ever having been in the river. The second theory could not hold because the sickness was not entirely confined to the students who had worked in the swamp land, and in reply to the third theory it may be said that the sick students represented all sections of the State.

In the presence of so many conflicting opinions entertained by gentlemen of intelligence, discrimination and observation, your committee proceeded to make a systematic and vigorous examination of every place and every thing which might possibly suggest a clue to the solution of the problem in question. Your excellency will recall the physical appearance of Clemson, its hills and valleys, and the relative positions of the various buildings. Taking the college building as a center, it will be observed that the watershed of the hill upon which it stands causes a part of the storm water to flow north to the river, west to the barracks and south and east through a gradually developed valley, round about the dairy and into the dairy and into the ravine on the east, north and south sides. On the northern edge of the ravine, in the valley, is located the dairy, a building probably 50 feet square. The site upon which it stands had been a small pond which had been filled in with debris of variable character, organic and inorganic and had been partially tilled drained. Between the dairy and the abrupt hills north there is a small space in which two springs rise. The larger spring was said to become muddy after a rain, and accordingly it had been enclosed with brick on three sides. The smaller spring, beside the door of the dairy, is included in a casing of impervious material about two feet in length by one foot in width. This spring sometimes becomes milky and is used exclusively in preparing the products of the dairy. The day of our arrival it rained heavily, and the next morning we traced the storm water from the adjacent hills over and around the imperfectly constructed storm ditch, besides the spring and upon the limited area

occupied by the dairy. On the surrounding hills over which the storm water flows are open privies to which no especial attention had been given, and the contents of which must be carried by each recurring rain into the valley and thence into the ravine.

Your committee, in continuance of their duty, examined the barracks, which they found defective in location, in construction, in ventilation and in its system of sewerage. Moisture is an essential element in the process of organic decomposition in the soil by which mysterious and dangerous products are evolved, heat and a moderate supply of air being necessary to this process. In the construction of a dwelling the sanitarian adopts the most efficient means for excluding dampness from the foundation walls and from the basement floors, for protecting the soil from impurities and to render it dryer by underground drainage and by opening the out flow. To prevent the pollution of the ground air it is of importance, and it is to be accomplished by removing the source of contamination; by facilitating the natural process of purification and by relieving the over taxed powers of the soil, by drainage and aeration.

In the second place protective measures must be resorted to for additional security. Be it remembered that cellars as usually constructed do not constitute a barrier to the escape of air from the sub-soil, and this is especially so in buildings which are heated artificially, in which case there is superadded a suction force created by the ascending rarified air. While it is impossible to prevent the aeration of ground air, it can by suitable devices be diverted into other and less harmful channels, and its dangerous influence minimized.

The foundation walls and the basement flooring of the entire building should rest upon a bed of impervious material, and should have a ventilating chamber under the entire surface of the cellar floor separated from the basement by an intervening pavement. The chamber should be connected with a chimney flue, to carry off the ground air which rises in autumn, winter and spring. During the summer when the ground air sinks a current of fresh air hurries downward and rises to the heated surface outside of the building.

Your committee failed to find that these ordinary sanitary requirements for the protection against ground air and moisture had been met in the construction of the dairy and the barracks. In the matter of ventilation there is no adequate arrangements in the barracks to get rid of the stagnant air charged with carbonic acid gas which must abound to an in jurious extent in such an unscientifically constructed building with its hundreds of inmates. In addition the water closets are improperly located and should not be within the main building, for the piping for the disposal of excretion is liable to be deranged by the gradual subsidence of the building, and by other causes, which may loosen the joints and allow the escape of sewer gas. Assuming the number of inmates of the barracks to be 300, the aggregate amount of said excreta for 12 months would probably be seven tons and about 12,000 gallons of urine.

To secure the continuous and rapid removal of this excreta and to prevent pollution of air and soil by their temporary detention, is an interesting problem in sanitary science. To accomplish this purpose the sewers must be perfectly tight throughout, so that whatever enters may pass to the outlet without leakage. The movement throughout the sewer must be continuous from head to outlet without halting to putrify. Besides, the sewer must be perfectly ventilated so that accumulated gases may not form and force themselves through the traps to the dwellings. Adequate means must be provided for inspecting and flushing the sewers, the size and form of which must be perfectly adjusted to its flushing appliances, that the usual dry weather flow may be made to keep it free from silt and organic deposits.

The following conclusions have been reached by your committee:

First.—That while it is not improbable that there has been some malarial fever at Clemson, it is unquestionable that the prevailing fever is typhoid.

Second.—That the open privies have been the prime cause of infection, and we view with suspicion the products of the dairy in the manufacture of which spring water at that place is used.

There are several recommendations your committee would respectfully make. Discontinue the open privies absolutely, and by a system of sewers have all the excreta from the various residences conducted to the river. Mean time enforce what is known as the "dry system," which consists in the admixture of dried earth or coal ashes with the excrement in sufficient quantities for absorbing and reducing it to an inodorous and harmless form. The material must be perfectly dry, and applied immediately and in sufficient quantity to cover the excretions and to remove all fluidity of the material. The water closet should be detached from the house and thorough ventilation insured, and should be frequently inspected and kept in perfect working order.

its operations and avoid the possibility of its posing as a factor in the possession of diseases.

Assuming that the barracks will be continued as a home for the students, the best recommendation we can make is to underdrain the narrow area between the east side of the building and the high embankment, the latter to be faced with granite. An improved system of ventilation should be introduced, such as is used in army institutions north—for instance, at Johns Hopkins university, by which perfect ventilation is obtained and regulated at will. The most modern system of sewerage should be used, and to prevent the possibility of contamination of the building by noxious gases the water closets should be detached from the building. The distant end of the sewer at the edge of the river should be so arranged as to escape submergence by river water and protect it against whatever might interfere with its office.

We recommend further, from the standpoint of sanitation, that vacation be given in the summer months, and your committee are impressed with the belief that it can be done without conflicting with the agricultural features of education at Clemson, and would subserve the highest interest of professors, the students and the college. The recent unfortunate experience of sickness and death at Clemson has awakened the spirit of criticism against the institution on the ground of unhealthfulness, which it may not be wise to ignore.

In conclusion, your committee might have discussed the laws regulating the evolution and extension of typhoid fever, and how in originating in soil and air pollution it gives rise to epidemics. They might have also cited abundant parallel cases corroborative of the position they have taken in this report, but they do not think these would lend additional emphasis to the plain fact of the existence of typhoid fever at Clemson and the imperative necessity of preventing its recurrence.

We have the honor to be Very respectfully,  
Charles R. Taber, M. D.,  
James H. Evans, M. D.,  
C. A. Reese, M. D.

**Why take Johnson's Chill & Fever Tonic? Because it cures the most stubborn case of Fever in ONE DAY.**

**CONCERNING CLEMSON**

**A Statement Made by the Board of Trustees in regard to the Fever.**

Clemson College, S. C., July 9.—Concerning the report of the State Board of Health in regard to the fever at Clemson College, the Board of Trustees make the following statement:

"The Board of Trustees of Clemson College, mindful of the important trust in their charge, feel called on to make a statement for the information of the people of the State in regard to the recent sickness at the college and its causes.

We have read the report of the State Board of Health, and have also had under consideration the report of the college surgeon, Dr. Redfern. In addition to the light thus thrown on the subject, we have made a personal examination of the college buildings and the surrounding grounds, and we are not satisfied at all as to the nature of the fever which has prevailed or as to its cause.

"We have great respect for the scientific ability and learning of the State Board of Health, but we are bound to question their conclusions, from the fact that eminent physicians in the neighboring counties have declared the fever at the college to be malarial and not typhoid in its nature; and there is grave doubt whether more than four cases of typhoid fever have been at the college this year.

"The cursory and imperfect examination made by the State Board of Health is shown by the fact that two palpable errors are made in their report. The dairy, which they place under the ban as a probable cause of disease, was not built on a pond which had been filled in, and there is not a single privy on the 'surrounding hills' above the dairy. The water from the only privy in the neighborhood reaches the ravine below the dairy. Then the statement is made, three separate times, that the water-closets should be outside the barracks and not inside, and should be 'detached' from them. In fact, the water closets were removed from the building more than two years ago, and they are now detached, with an open current of air passing between. They are now reached by a latticed gallery fifteen feet long, and there is no possibility of sewer gas getting into the building.

"But we are not disposed to criticize the State Board of Health, and will carry out all of their recommendations that are possible, and leave no stone unturned to allay all cause of doubt as to the proper sanitation

of the college buildings and grounds.

"We have never had any trouble before, and we anticipate none in the future other than the usual climatic and unavoidable diseases of the country.

"The vacation will be changed and instead of being in the winter will be in summer, the scholastic year beginning hereafter on the second Wednesday in September and closing the second Thursday in June.

"Every suggested or possible cause of fever will be removed and the buildings thoroughly disinfected and put in good order.

"We do not hesitate to give assurances that the college will be guarded against a recurrence of the trouble, if it is possible."

**JOHNSON'S CHILL AND FEVER TONIC**

*Cures Fever in One Day.*

Just for Fun

Mr. John J. Chapman, of New York, having written to a Chicago paper that the magazines are edited entirely from a commercial standpoint. The Month, "a journal of cultivation," published in New York, remarks:

"I have heard this complaint before, and should like to know what would be the effect of editing magazines from the standpoint of Mr. Chapman and others who share his opinion. If a man can be found who is willing to invest money without asking a return, such a magazine may be published, but not otherwise.

Why should publishers be expected to work for love any more than any other class of business men? Would Mr. Chapman—who is a painstaking lawyer—devote his time to cases that he could not win, or to clients that could not pay? I do not believe he would—through I know of no one who would be more likely to do so."

Magazines are business enterprises, and if they are to succeed they must be run on business principles. It costs a great deal to produce them, they employ large crops of editors and writers and agents, they charge a fair price for their advertising space and are sold to subscribers and readers at next to nothing. They are not supported by public taxation as are the public schools, and in order to exist they must be conducted from a commercial standpoint. As with magazines so it is with newspapers. They are business enterprise also, and must be managed on business principles. They should not sell themselves to the promotion of unworthy objects, or aid in advertising the interests of unworthy men, but it is necessary that they shall manage their affairs on strictly business lines.

We sometimes fear that the business end of a newspaper is not appreciated even in the most appreciative communities; that a newspaper office is regarded as a place for the free distribution of unlimited information upon all sorts of subjects; that newspapers are printed to give away to any one who might be good enough to ask for them. Let a newspaper publish a two column article in which Jones happens to feel a special interest, and Jones is almost certain to appear with a request for half a dozen copies of the paper. Print a three column account of the celebration of a military, and Jenkins will ask for one hundred and fifty copies for distribution, Jenkin's name having figured somewhat prominently in the newspaper account. Investing fifty cents in an advertisement, and Smith will think it hard that he cannot get ten dollars worth of notice "among the locals." Working off a long official report of a semi-public undertaking on an amiable reporter—a report which could be covered in a dozen lines—and Brown will want to know the next day what reduction he will be allowed on twenty-five papers.

As the New York magazine puts it: "Why should publishers be expected to 'work for love any more than any other class of business men?' No one would go to a cigar store and ask for a cigar without expecting to pay for it or to a shoe store for a pair of shoes, or to a clothing house for a pair of trousers, or to a dry goods establishment for a bolt of cloth, without paying for the goods. Why should there be free magazines and free newspapers and not free cigars and free shoes and free trousers? We do not mean to say that such a state of things obtains in the electric City by the Sea—perish the thought! But we have heard that in Augusta and Savannah and other towns in the outlying provinces there is a disposition among some to think that newspapers are a public convenience and are published just for fun.—News and Courier.

The strike of coal miners in Pennsylvania, Ohio and adjacent states is spreading and the officers of the miner's association are endeavoring to secure the co-operation of all miners and shut down every mine. A coal famine is feared in the west and unless a supply can be obtained several cities will shortly be without light, water or electric railway facilities. They have only a small supply of coal on hand and it is becoming difficult to obtain any.

**Arrested For Arson.**

**Effect of \$500 Reward Offered by Union's Council.**

Special to The State. Union, July 7.—Dr. W. M. Meder, a prominent citizen of this place, was arrested here late this afternoon for attempting to burn the handsome new bank building in February last. The arrest was not a surprise, as it has been expected here for some days. Dr. Meder was accused at the time, but for some reason the case was never pushed.

Immediately after the attempted burning of the Union hotel here the council offered a reward of \$500 for the party who attempted to burn the bank building, and this arrest of Dr. Meder is the result. Public opinion is about equally divided as to the above party.

**Police Powers.**

May Not Arrest Without Warrant, Unless Present When Offense Was Committed.

A nice point of law that may be of interest to the various town councils of the State was decided by Judge Buchanan. Ben F. Townsend had been tried by the council for fighting a short time ago in a store. No police had seen the difficulty. He was summoned to appear before council. His attorney put up the argument that he had not been legally summoned, and the council had no right to try the case, as he was not properly before the Court. The council fined him five dollars. He appealed.

The Judge held that the Mayor's Court only had the rights vested in magistrates and that unless a party was seen by an officer of the law while committing the offense or in a hot pursuit, that the party could not be arrested except with a warrant sworn out by someone. Mr. Sawyer, attorney, made a very forcible argument for Townsend's side, and, after hearing it, the Judge not only set aside the mayor's decision, but reversed his own decision in a similar case, in which he had just sustained the mayor's decision.—Union cor. News and Courier, July 9.

**Take JOHNSON'S CHILL & FEVER TONIC.**

**Turkey Defies the Powers.**

Constantinople, July 5.—Contrary to expectations, the decision of the council of ministers yesterday was not favorable to the demands of the ambassadors relative to the Greco Turkish frontier negotiations. The situation, therefore, is regarded as being very strained, the Turkish reply virtually implying a rupture of the negotiations and that the powers must make a concession or adopt measures to enforce their decision.

It is reported that the grand vizier has declared to the sultan that he will never sign an agreement based on the strategic lines proposed by the ambassadors. At the same time it is thought in some quarters that the attitude of the Turkish government is designed to enable the sultan to yield later by sacrificing some of his ministers, and rumors of impending cabinet changes are already current.

**Baby Cried Night and Day**

**Discharge from Her Ears—Top of Her Head Broke out in Scrofulous Eruptions**

Grew Worse Under Treatment Till We Gave Her Hood's Sarsaparilla—She Has Rosy Cheeks Now.

"When my baby was two months old she cried night and day, and seemed to be in great pain. She had a discharge from her ears, and the top of her head broke out in scrofulous eruptions. The doctor gave me something to stop the discharge and ease the pain, but his treatment did not cure her and we were sorry to see she grew worse.

Instead of better. The top of her head broke out with scrofula. A crust would form on her head and fall off, taking the hair along with it, and this continued for two or three months, when something seemed to tell me to try Hood's Sarsaparilla, and I did so, together with Hood's Pills and Hood's Olive Ointment. Soon

The Discharge Stopped and the sores were rapidly healing. In a short time her hair grew out and she now has rosy cheeks and is all right in every way." Mrs. I. LLOYD, Spring Valley, N. Y.

Hood's Sarsaparilla is the Best—In fact the One True Blood Purifier. Sold by all druggists. \$1. Six for \$5. N. B. If you decide to take Hood's, do not be induced to buy any substitute. Get only Hood's.

**Ohio River & Charleston Railway Co.**

SAMUEL HUNT, Agent for Purchaser in Effect May 5, 1897. CAROLINAS DIVISION

NORTHBOUND.—(Daily except Sunday.)

	No. 33.	No. 11.
Lv Camden.....	2 00 pm	
Lv Kershaw.....	2 45 pm	
Lv Lancaster.....	3 25 pm	
Lv Catawba Junction	4 00 pm	
Ar Rock Hill.....	4 30 pm	
Lv Rock Hill.....	4 30 pm	
Lv Yorkville.....	5 05 pm	
Ar Blacksburg.....	6 20 pm	11
Lv Blacksburg.....		8 10 am
Lv Patterson Springs		8 40 am
Lv Shelby.....		9 10 am
Lv Rutherfordton.....		10 50 am
Ar Marion.....		12 20 pm

SOUTH BOUND.—(Daily except Sunday.)

	No. 32.	No. 10.
Lv Marion.....	4 45 pm	
Lv Rutherfordton.....	6 20 pm	
Lv Shelby.....	8 40 am	
Lv Patterson Springs	9 10 am	
Ar Blacksburg.....	9 00 pm	
Lv Blacksburg.....	8 30 am	
Lv Yorkville.....	9 35 am	
Ar Rock Hill.....	10 20 am	
Lv Rock Hill.....	10 20 am	
Lv Catawba Junction	10 45 am	
Lv Lancaster.....	11 22 am	
Ar Kershaw.....	12 05 pm	
Lv Kershaw.....	12 05 pm	
Ar Camden.....	1 00 pm	

Diner at Kershaw.

**CONNECTIONS**

No. 32 has connection with the Chester & Leonoir Railroad at Yorkville, S. C., with the Southern Railway at Rock Hill, S. C., with the Seaboard Air Line at Catawba Junction, S. C., with the Lancaster & Chester Railroad at Lancaster, S. C., and with the South Carolina and Georgia Railway at Camden, S. C. No. 33 North bound train has same connections as No. 32.

SAMUEL HUNT, President. S. B. LUMPKIN, Gen. Pass Agt

**Atlantic Coast Line.**

WILMINGTON, COLUMBIA AND AUGUSTA RAILROAD.

**CONDENSED SCHEDULE.**

**TRAINS GOING SOUTH**

Dated May 16, 1896	No. 55.	No. 51.
	P. M.	A. M.
Leave Wilmington	7 30	
Leave Marion	6 40	
Arrive Florence	7 25	
	P. M.	A. M.
Leave Florence	7 40	7 30
Arrive Sumter	9 12	4 40
	P. M.	A. M.
Leave Sumter	9 15	9 35
Arrive Columbia	10 35	10 55

No. 52 runs through from Charleston to Central R. R., leaving Lanes 8 26 a. m., Manning 9 05 a. m.

**TRAINS GOING NORTH.**

	No. 54.	No. 53.
	A. M.	P. M.
Leave Columbia	7 50	7 15
Arrive Sumter	7 12	6 38
	A. M.	P. M.
Leave Sumter	7 15	6 45
Arrive Florence	8 25	7 55
	A. M.	
Leave Florence	8 55	
Leave Marion	9 34	
Arrive Wilmington	12 15	

\*Daily. †Daily except Sunday.

No. 53 runs through to Charleston, S. C., via Central R. R., arriving Manning 7 10 p. m., Lanes 7 48 p. m., Charleston 9 30 p. m. Trains on Conway Branch leave Chadbourn 10 40 a. m., arrive at Conway way 1 00 p. m., returning leave Conway at 2 45 p. m., arrive Chadbourn 5 15 p. m.; leave Chadbourn 5 30 p. m., arrive at Hub at 6 20 p. m., return, leave Hub 8 30 a. m., arrive at Chadbourn 9 15 a. m. Daily except Sunday.

JOHN F. DIVINE, Gen'l Supt. J. R. KENLY, Gen'l Manager. T. M. EMERSON, Traffic Manager

**SOUTH CAROLINA AND GEORGIA RAILROAD.**

**PASSENGER DEPARTMENT.**

Corrected to Jan. 24th, 1897.

	DAILY.	DAILY
Lv Charleston	7 10 am	5 30 pm
Ar Summerville	7 46 am	6 10 pm
" Pagnalls	8 18 am	6 50 pm
" Georges	8 30 am	7 04 pm
" Branchville	9 00 am	7 50 pm
" Rowesville	9 15 am	8 07 pm
" Orangeburg	9 28 am	8 24 pm
" St Matthews	9 48 am	8 48 pm
" Fort Motte	10 00 am	9 03 pm
" Kingville	10 10 am	9 20 pm
" Columbia	10 55 am	10 10 pm
Lv Columbia	7 00 am	4 00 pm
Ar Kingville	7 40 am	4 44 pm
" Fort Motte	7 51 am	4 55 pm
" St Matthews	8 02 am	5 09 pm
" Orangeburg	8 24 am	5 27 pm
" Rowesville	8 38 am	5 42 pm
" Branchville	8 55 am	5 55 pm
" Georges	9 35 am	6 37 pm
" Pagnalls	9 48 am	6 50 pm
" Summerville	10 22 am	7 22 pm
" Charleston	11 00 am	8 00 pm
Lv Charleston	7 10 am	5 30 pm
" Branchville	9 15 am	7 50 pm
" Bamberg	9 41 am	8 19 pm
" Denmark	9 52 am	8 31 pm
" Blackville	10 10 am	9 50 pm
" Williston	10 27 am	9 10 pm
" Aiken	11 09 am	9 57 pm
Ar Augusta	11 51 am	10 45 pm
Lv Augusta	6 20 am	3 20 pm
" Aiken	7 08 am	4 07 pm
" Williston	7 49 am	4 44 pm
" Blackville	8 08 am	5 03 pm
" Denmark	8 20 am	5 17 pm
" Bamberg	8 33 am	5 29 pm
" Branchville	9 10 am	5 55 pm
Ar Charleston	11 00 am	8 00 pm

Fast Express, Augusta and Washington, with Through Sleepers to New York.

Lv Augusta	3 05 pm
Ar Aiken	3 44 pm
" Denmark	4 25 pm
Lv Denmark	6 25 am
" Aiken	7 28 am
Ar Augusta	8 10 am

Daily Except Sunday.

Lv Camden	8 45 am	2 25 pm
Ar Camden Junction	9 35 am	3 55 pm
Ar Kingville	10 05 am	4 35 pm
Lv Kingville	10 25 am	6 00 am