

SANITARY COMMISSION.

NO. 17.

Report of a Preliminary Survey of the Camps of a portion of the Volunteer Forces near Washington.

WASHINGTON, *July 9*, 1861.

TO THE SANITARY COMMISSION.

GENTLEMEN: Your Resident Secretary has inspected twenty of the volunteer camps during the last ten days. Of most of these his examination has been cursory, his object being to acquire some knowledge of the ordinary and average condition of the force, to enable him the better to direct subsequent inquiry, rather than to personally make an exact survey of the condition of each regiment. Of some few, however, his examination has been thorough, while from others he has received reports of inspections made under his instructions with a view to obtain precise information. Considerable confidence can therefore be placed in the general conclusions as to matters of fact, which will be expressed. The camps of the Rhode Islanders and of the 71st and 12th New York militia have not been visited, because it has been understood that their condition was exceptional, and no time could be spared from more general duties for the purpose.

The Resident Secretary has also endeavored to make himself acquainted with the character of the supplies furnished, and with the manner of their distribution.

Having been accompanied in most of his visits by Dr. Harris, the Resident Secretary will omit, as far as practicable, observations on the distinctly medical condition of the forces, presuming that Dr. Harris, on his return from Fort Monroe, will present a report on this topic.

SITUATION AND DRAINAGE.

The camps, generally, are favorably situated as to natural surface drainage. In many cases, not the slightest artificial drainage has been arranged; in others, surface-drains have been dug on one or two sides of a tent, or a line of tents, but an outlet entirely neglected, and this, sometimes, where an hour's labor of a man would have formed one. The drains are consequently ineffective. A complete system of drains, such as should have been laid out and made in the very hour the tents were pitched, can scarcely be found in any camp. In consequence of this neglect, during a recent sudden heavy rain at night, it is reported that water stood two inches deep in the tents of many camps. In respect of drainage by filtration, the quality of the soil and subsoil varies too much to allow any general statement to be made.

The camps are generally on open ground, but some of them in the shade of woods, and the latter seem generally considered to be the more fortunate sites. Looking to the health of the men, this is unquestionably a grave error, of which evidence abounds. It is an advantage, however, to have a shaded place for drill near the camp, as is sometimes the case with those on the open ground.

The tents are placed much closer together than they should be; closer than is usual in camps of regulars, unless under special circumstances.

The site of the camps is selected by an officer of the quartermaster's department, not by the regimental officers.

Night-soil has been recently deposited in large quantity within a short distance of several of the camps, and between them and the town. This has occurred, because the scavengers have been unable to pass the lines of sentries at night. Immediately on learning this, a note was addressed by the Secretary to the mayor of the city, and a communication obtained with the health officer, who readily promised that the practice should be avoided. The use of cheap disinfectants was recommended to him to be applied to the night-soil already deposited near the camps.

MALARIA.

There have been but few cases of intermittent fever found; three in one regiment is the largest number; this camp was situated near a pond.

SUN-STROKE.

A few cases have occurred in almost every encampment. The men are generally provided with "havelocks," which are worn or dispensed with according to the caprice of individuals. Even at the dress parade in most regiments, each man wears a havelock or not, at his pleasure. The havelocks, as generally made, are of little use. The article worn by the Indian troops, pictures of which probably suggested that termed in America the havelock, is quilted and stiff, resting on the shoulders, and thus kept open, clear of the ears, and allowing a free circulation of air beneath. Men who have been drinking freely of water when on a march, or at drill, are the most frequent sufferers from sun-stroke.

WATER.

Water, of good quality, is generally found in abundance near each camp.

TENTS.

The most common tent is a poor affair, being similar in form to the French *tent d'abri*, but without its advantage of portability. The common wall-tent is also largely used, and is much better. During the day the walls are triced up, and the tent is well ventilated; but at night, if the walls are lifted, or the flaps opened, the drift of the dew-laden wind across the men sleeping on the ground is felt to be severely cold. In most cases, therefore—the officers paying, apparently, no attention to the matter—the tents are closed as tightly as possible at night, and are crowded full of sleepers, six to eight and sometimes ten men being found in each. Of course they breathe a most vitiated atmosphere. Those who are most sensitive to this are sometimes forced out of the tent; and in a camp visited at night, the Sec-

retary discovered that many men were sleeping on the ground, without any protection from dew or malarious influences. This had not been regarded, and apparently was unknown to the regimental officers. The wall tent, when provided, as it is sometimes found to be, with large square openings at the end, with flaps to button over them when necessary, is the most comfortable tent for summer. This, or some other opening for ventilation, well above the ground, should be provided in all cases. The "Sibley" is, however, much the best tent for all purposes, and it is to be hoped that it will rapidly displace all others. It is easily ventilated, and at the same time supplies the best protection to its occupants during inclement weather.

The men generally sleep on a single blanket spread upon the ground. The regiments sent by the New York Union Defence Committee, and some few others, are provided with india-rubber tent-floors or blankets, and, in some cases, the tents are furnished with plank floors. These, which would otherwise seem to be best for a fixed camp, afford an unfortunate facility for the accumulation of unwholesome rubbish. Where there are no floors, loose straw is sometimes used, and in other cases straw in sacks.

SINKS.

In most cases the only sink is merely a straight trench, some thirty feet long unprovided with a pole or rail; the edges are filthy, and the stench exceedingly offensive; the easy expedient of daily turning fresh earth into the trench being often neglected. In one case, men with diarrhoea complained that they had been made sick to vomiting by the incomplete arrangement and filthy condition of the sink. Often the sink is too near the camp. In many regiments the discipline is so lax that the men avoid the use of the sinks, and the whole neighborhood is rendered filthy and pestilential. From the ammoniacal odor frequently perceptible in some camps, it is obvious that the men are allowed to void their urine, during the night, at least, wherever convenient.

PERSONAL CLEANLINESS.

In but few cases are the soldiers obliged to regard any rules of personal cleanliness. Their clothing is shamefully dirty, and they are often lousy. Although access is easily had to running water, but few instances are known where any part of the force is daily marched, as a part of the camp routine, to bathe. A careful daily inspection of the state of the men's clothing is probably made in few, if any, regiments. Whatever good qualities they possess in other respects, so far from being good soldiers in this, which has been long held the elementary condition of good soldiers, our volunteers are, in many cases, really much dirtier than it can be believed they have been accustomed to be in their civil life; and it is obvious that neither they nor their officers comprehend in the slightest their duty in this particular, nor the danger and inconvenience they are bringing upon themselves by its neglect. The clothing of the men from top to toe is almost daily saturated with sweat and packed with dust, and to all appearance, no attempt is generally made to remove this, even superficially. Each man should be provided with a switch or small cat with which to whip his clothing, and a brush to remove the dust after it has been brought to the surface. It is suggested that these and other instruments of cleanliness should be provided to the men, as in the French service, and that they should be required to carry them and exhibit them at inspection, as a part of the Government property for which they are responsible.

CAMP POLICE.

There is often hardly a pretence of performing the ordinary police duties of a military camp. The men take food into their tents, and its crumbs and morsels are to be seen covered with flies in the inside, in the intervening spaces, and even in the camp-streets, which seldom appear well swept. Often the drains are so neglected, that they become receptacles for rubbish. Within the tents a musty smell is often perceptible. It is suggested that the Commission should recommend that orders be given that during the summer all camps should be shifted at least

once in ten days, unless imperative military reasons forbid, and that twice a week all tents should be struck, turned inside out and shaken, all bedding and blankets shaken, the site of tents swept, and, if practicable, sprinkled with a disinfecting fluid or lightly strewn with powdered charcoal or plaster of paris. It is believed that some very detailed instructions in camp-police duties may with great advantage be furnished the officers.

CLOTHING.

The volunteers have generally an abundance of clothing, such as it is, though there are a few who have not a change of shirts. The dress of the majority is inappropriate, unbecoming, uncomfortable, and not easily kept in a condition consonant with health. It is generally much inferior, in every desirable respect, to the clothing of the regulars, while it has cost more than theirs. Considering all the conditions and contingencies of the business in which the volunteers are about to engage, and in view of the many advantages of simplifying all the machinery of the army as much as possible, it may be best for the Commission to recommend that volunteers for ordinary infantry service be hereafter required to adopt the regulation uniform. This could be furnished by the Government under bonds to those recruiting the regiments, or to the State governments called upon or undertaking to supply them, at a much less price than, judging from recent experience, any other tolerable uniforms can be procured by special contract. It may also be best to recommend the early substitution of the regulation garments for those now worn by the volunteers ; these being already in many instances, in bad condition. A New York soldier has been seen going on duty in his drawers and overcoat, his body coat and pantaloons being quite worn to shreds. It is possible that some modification of the present regulation uniform may be made with advantage. If so, this should be in the direction of greater simplicity of parts, greater independence of the baggage wagon, and more grace of appearance. The most conspicuous part of the present uniform is the hat. It is said to be convenient and healthful. The common kepi of the volunteer is pert, unsubstantial, ungraceful, uncomfort-

able, and dangerous. Covered with what is called the havelock, it is excessively conspicuous—quite unfit for scouting or skirmishing duty. It interferes with the hearing, and, through the common neglect of duty of the volunteer officers, it is allowed to be worn without uniformity, and becomes very untidy. The regulation hat, as it stands, is better than any other military head-dress to be now seen in Washington. Yet its heavy and inelegant character might, it is hoped, be somewhat modified without lessening its essential value. A slight enlargement of the brim, a more tapering form to the crown, and the introduction of some color, possibly making the whole hat of a neutral tint, with a complementary band or plume, would certainly effect an æsthetic improvement. A different kind of shirt might economically displace the present one, which is coarse and harsh in quality. The regulation shoes and socks are far superior to those generally worn by the volunteers, but might perhaps be better. A very slight improvement in the quality of these articles would justify a large additional cost. The French trappings of the soldier, of the latest pattern, seem to be more substantial and convenient than those of the United States regular pattern, better calculated to preserve health and a certain degree of comfort under circumstances which most try the strength and *morale* of the soldier. If this is the case, Government should not for a moment hesitate to adopt them. Our volunteers are generally men unaccustomed to the necessary hardships of the soldier, suffering from loose discipline, and the rashness, improvidence, ignorance, and neglect of extemporized officers. They need, therefore, far more than regular soldiers, every advantage which it is possible for science and art to offer, for bearing about with them, in the easiest possible manner, means of sustaining their strength, which shall be proof against accidents and available under the greatest variety of circumstances. To simplify what is to be carried as far as possible, and yet to make the soldier more than ever independent of fortune, must be the purpose of all suggestions for a change. No improvement is so great as that which lessens the necessary recurrence of the soldier to the baggage train and the hospital. Whatever does this must almost certainly be economical.

De gustibus non disputandum. No two reports agree, and the Secretary, having given more time to the study of the subject than to all others during the last week, confesses himself to be yet bewildered by the different statements of matters of fact, and the different judgments on matters of opinion which he has constantly encountered.

Where there is not a most incredible ignorance, incapacity, or neglect on the part of the officers, the regiments are supplied with an over-abundance of the raw material of food, excellent of its kind.

To all appearance, the Commissary Department is pursuing a generous, wise, and liberal course, dispensing with the usual forms and checks, anticipating and overlooking the neglect of the volunteer officers, and supplying a larger variety of food than is usually served to regulars, or than can be drawn for, as a right, under the army regulations. This very laxity, however, has its disadvantages, and that regiments should sometimes meet with considerable hardship from irregularity of supplies is a matter of course. It is, indeed, wonderful that such a large body of men should be so fully and regularly supplied as is our army, and the Commission need hardly concern itself with the exceptional instances. It is doubtful if any army of the same size ever fared as well as to substantial articles of food, for months together. The raw materials furnished are generally atrociously cooked and wickedly wasted. In consequence of waste, complaint is sometimes made of inadequate supplies, but this is remarkably rare, proving that with care the supply would in all cases be over-abundant.

The question remains whether the food is of the best kind that could be afforded, and in sufficient variety? There are grave objections to the introduction of almost any new article into the dietary of the army; simplicity, and facility of transport and of preservation being necessary conditions not only of each article in itself, but of all the ration in the aggregate. To increase the number of articles is to increase the duty already heavily overburdening the Subsistence Department, and there are great and

insurmountable difficulties in enlarging the force of the Subsistence Department with the rapidity required to provide for all the contingencies of the heterogeneous host, with its incapable officers, suddenly dependent on that department for the sustenance of life. It is a great thing to accomplish the provisioning of this host with the simplest and most easily procured and transported food, by any possible means. It is a still greater thing to have this done honestly and thoroughly well, guarding against scandalous frauds and great and disgusting wastes. Every addition to the dietary of the army increases the difficulty of this task.

This must not be forgotten in the consideration of the thousand and one improvements on the ration which have found and will continue to find public advocacy, and some of which are being now especially urged on the Commission as worthy of its recommendation. It is daily made obvious that no intelligent civilian deems the present regulation ration a suitable and sufficient one for the volunteers, called from the north to the south in the heat of summer ; but rash and arbitrary changes might easily be made which would be extremely perilous.

For a well-established force with but a small proportion of recruits, and these chiefly accustomed to a poor diet, marching or stationed on a distant frontier, with the advantage of a well-regulated sutler's establishment, a well-managed company fund, and with the guidance and inspection of officers who understand their business, and must attend to it for their own safety's sake, if for no better reason, our army ration is excellent. We have had a rich government, a small army, and an abundance of educated officers, who have patiently studied to effect improvements in its administration. In every line, the regulations show careful observation and reflection, and the most thorough, honorable, and conscientious effort to bring about that which was best for our army, in the average circumstances under which it has been organized, officered, and placed hitherto. The only criticism which can be made against the regulations, general and special, seems to the Secretary to be, that in the effort to guard against fraud and waste, and to impose restrictions and checks upon

extravagance, sufficient discretion to vary from the ordinary rules, when desirable, has not been had, and habits of routine and respect for precedent have been too much expected and encouraged. Even this is made with some doubt of there being present occasion for it, and the Secretary is inclined to believe that little is needed to effect all that is practicable, further than to strengthen the hands and give increased confidence to those now having the largest responsibilities in this matter.

Clear, fat, salt pork is the back-bone of the army ration. The authorized quantity of beef is larger than that of pork, but beef is liable to more contingencies of failure than pork. Fat pork of excellent quality, with beans and coffee, seldom fails. And under frontier hardships, in contrast to the ordinary diet of the savage, or even of the pioneer settler, these furnish not a bad stand-by, especially for cold weather. Beans boiled five hours with salt pork make a soup or porridge, savory, exceedingly nutritious, and wholesome for most men ; add a copious allowance of hot coffee, and men in good health coming in wet, cold, and weary from a scout or from guard duty, can hardly be supplied with anything better. And it is for men in such circumstances that our military officers, whose soul is in their business, have had to think, first and last. Satisfy those who have been used hardest, upon whose pluck and cheerfulness and strength the most has depended, and there need be little care for the rest.

But here, in the midst of summer, we have an army of unacclimated men, drawn chiefly from dense communities, differing among themselves greatly in their habits, but nearly all accustomed to a large variety of food.

Fat, salt pork is not proper food for them, and the department has provided the alternative, beef, generally of the most excellent quality, in abundant quantity. If the men have too much salt food here at present, it is the fault of their regimental officers. But as the army moves southward, will it not often happen that, owing to accidental causes, one or the other of these articles, beef or salt pork, will fail ? If so, then, as far as meat is concerned, the diet must be either exclusively of pork or exclusively of beef. It is worth while to consider whether arrangements cannot be

immediately made for a large supply of fresh mutton. Could not, at least, desiccated mutton as well as desiccated beef, and desiccated beef soup, be procured in a short time in large quantities? If so, no time should be lost in establishing this guard against the danger of failure of better provisions.

As to vegetables, there is not probably a single surgeon attached to a volunteer regiment in the vicinity of Washington, who will not testify that the troops are now suffering in health for a want of vegetables. And whatever may be the character of some of the volunteer surgeons, there are, among them, gentlemen of as high professional reputation as any in the army. Directly or indirectly, the prevailing diarrhœa is, in almost every case, attributed to this cause. A case of scurvy in the troops about Washington is already reported.* The volunteer army is generally believed to be in great danger of decimation by scurvy and dysentery. It must be admitted that there is great difficulty in procuring and transporting a large daily supply of green vegetables in good order, and in serving them out systematically for eighty thousand men. It appears to have been not possible, up to this time, to obtain even the necessary local means of transport for this purpose. Are these difficulties to increase as the army is moved into the southern wilderness? In any case this seems really the most important point in which it is possible for the energy and enterprise and capital of the Government to be directed for the protection of the army.

A liberal allowance of fresh potatoes, when these can be procured, and, at all events, of desiccated potatoes, mixed vegetables, and dried fruits, which can be supplied with as much certainty as pork, would add vastly to the cheerfulness of the army, and thus to its strength and health, even if it were not certain to do so more directly. These articles should be issued *by regulation*, and not according to the judgment or caprice of the commanders or quartermasters. It appears to the Secretary that the addition of pepper to the ration is practicable and desirable. The practicability of adding butter is less certain, but it is believed that

* A number are reported at the West.

under most circumstances for this army, there is no difficulty of consequence in the way of it, except the general difficulty of complicating and increasing the excessive duty of the subsistence department.

COMPANY FUND.

The "company fund" arrangement of the regulars scarcely exists, except where by chance some vigorous old army officer is in charge, and is not to be expected to answer any good purpose during the summer with the volunteers. It is useless, therefore, to point to it as a practicable means of supplying their wants.

SUTLERS.

Some of the camps have sutlers; most have not. At one of the sutler's tents, contrary to the articles of war as well as the army regulations, spirits were furnished the men without restriction. This regiment being composed in large part of Continental Europeans, it was alleged that no harm had resulted, there being but little drunkenness, and but little use of the guard-house. This is also asserted with reference to all the German regiments, at one of which a considerable number of men were found sitting at a long table, under a bower which they had themselves constructed, drinking lager beer, and singing. The convivial recreation thus afforded the men was deemed by the commanding officer and by the surgeon to have a favorable effect on the health of the regiment, in which there was found less diarrhœa than at any other examined. Beer is supplied to all the Germans by sutlers, who dispose of it for a claim on the wages of the men at pay-day, as usual with sutlers. Though much less than in most armies, there is a good deal of drunkenness among the soldiers, who are generally granted leave of absence to visit the town in much too large numbers, for too long a time, and too frequently. It is suggested that the Commission apply to headquarters for an order to prevent leave of absence from camp being granted except to a limited number of any regiment at a time, and only within certain hours of the day. A further act of the military government, to close

the dram-shops and bars during the hours allowed for soldiers to be out of their camps, and requiring the police guard of the city to take all soldiers without a pass or not accompanied by an officer to the guard-house, would unquestionably have a most favorable influence on the health of the army of Washington.

For the soldiers in camp, a proper enforcement of the army regulations, and a proper use of the discretion allowed the surgeons, will supply to the men all the spirits, and all the restrictions upon the use of spirits, which it is best they should have. Whether a moderate quantity of malt liquor might not with advantage be added to the ration is possibly a question worthy of consideration by the Commission. In the few cases where it has been found to be habitually used, the testimony of the regimental surgeons is, so far as it goes, conclusive, as to its wholesome influence. (See statement of Professor Hamilton, at the end of this Report.)

A complaint of excessive thirst is frequently heard. A number of men have stated that they drank six times as much water as they ever did before. "Too much meat," or rather a want of sufficient vegetables, is probably the chief reason of this. "Too much coffee" is another common complaint, meaning, evidently, that too much is expected of coffee, or that, without drinking more coffee than is thought to be wholesome, the appetite at breakfast is not satisfied.

It is a custom to drill the men in most regiments for two hours immediately after the break of day, and before they have had any nourishment. Many suffer much inconvenience from this. Must it not necessarily be harmful in a region at all subject to malarious influences?

CAMP COOKING.

Mr. Sanderson's report on camp cooking will be presented to the Commission, and the Secretary refrains from any observations at present on this most important subject. It is enough to say, that in no respect are the volunteers in so much need of instruction, advice, orders, and assistance, as in this. Perhaps the

best way of meeting the difficulty would be at once to endeavor to obtain the services of sea-cooks from shipping ports, and attach them, one to a company, throughout the army.

The report of Dr. Harris will leave it unnecessary for the Resident Secretary to place his observations on camp and general hospitals at this time before the Commission. The subject of hospital supplies will need immediate attention, and when it comes up, he has certain measures to propose.

The Secretary must say, in conclusion, that he is compelled to believe that it is now hardly possible to place the volunteer army in a good defensive condition against the pestilential influences by which it must soon be surrounded. No general orders calculated to strengthen the guard against their approach can be immediately enforced with the necessary rigor. The captains, especially, have in general not the faintest comprehension of their proper responsibility; and if they could be made to understand, they could not be made to perform the part which properly belongs to them in any purely military effort to this end. To somewhat mitigate the result is all that the Commission can hope to do. If the Commission and its agents could be at once clothed with some administrative powers, as well as exercise advisory functions, far more could be done than will otherwise be the case. To say, "you had better do so and so," will, nine times out of ten, accomplish nothing; to report a filthy sink, or a lazy captain, or roguish sutler, to headquarters, while grand movements are pending, and efficient leaders are scarce, and the value of their minutes is as the value of years with most men, will accomplish nothing. If it were possible, without interfering with discipline, for the Commission and its agents to have a claim upon the commander of a camp for the means at his disposal for abating a nuisance within it, much could be done. This may be thought too large a power of interference to grant to civilians. But it must not be forgotten that the volunteers are mainly officered by men who a few weeks ago were civilians, and who, in their eagerness to learn "tactics," have hardly yet given any

study to other duties. At least there should be the right to require, where the advice of the Commission is disregarded for military reasons, that those reasons should be given in writing by the commanding officer to his military superior.

Looking still to preventive measures, and neglecting in this report the whole question of the treatment of the sick and wounded, the Secretary must ask how is advice to be given so as to be at all effective? Much may be done by the distribution of manuals, by the reiteration of standing orders, and by giving more detailed and elementary instructions than are afforded in the army regulations; but it is believed that the mass of the volunteer officers cannot be reached by such means.

The Resident Secretary, in order to be able to report the condition of the volunteer forces in this vicinity and at Fort Monroe with more exactness, to the Commission, at this session, has, within a few days, accepted the voluntary services of two competent persons, who have undertaken to visit camps, and, under his instructions, to examine their condition with all practicable thoroughness. The printed questions of the Commission's Document, No. 8, have furnished the basis of inquiry. Something has been added by the Secretary to these, and each inspector is instructed to exercise his judgment in going further, but is especially enjoined to examine with his own eyes, and by smelling and tasting, whatever requires it. The value of such an investigation, in furnishing information for the Commission to act upon, can best be learned by a perusal of some of the reports made by the inspectors. But the Secretary is inclined to believe that the greatest value will soon consist, if it does not already, in the fact, that while aiding the inspector, the attention of the regimental officers is for the first time gravely and specifically called to the sources of danger which they have allowed to be established in their camps, and which they cannot account for without acknowledging a neglect of their own, and to the information and suggestions for improvement which they will incidentally receive from the inspector. Thus far, the utmost willingness to exhibit the actual condition of their camp has been asserted, and, apparently, in good faith, by all

officers called upon. The Secretary is at present of the opinion that more is to be effected in the way of prevention by this agency than by any other means at the immediate command of the Commission. The business of such inspectors, if many should be employed, will need to be carefully systematized; they must be thoroughly instructed, and should be provided with printed advice upon various subjects of camp life and military duty, to be furnished as occasion may offer to officers of different grades, to cooks, and to privates. Thus presenting themselves to make official inquiry only, they will, without special effort or intention, really be the best possible missionaries of sanitary science to the army. If there should be 300,000 men in the field—and it is thought that each regiment should be visited at least once a week, on an average—twenty men of special qualifications for the duty would probably be needed as traveling inspectors. The two last reports of the inspector who has been engaged in this vicinity, together with one from the inspector at Fort Monroe, are laid before the Commission, that the character of this service may be the better understood.

A P P E N D I X .

JULY 9, 1861.

* * * *Regiment, 1040 strong. Colonel* * * * *
In camp three weeks.

*1. The site of the camp * * * * The ground high, cleared, with a neighboring shade of oaks, and of excellent natural drainage. The soil is of a compact clay, with a thin surface of arable land. There are no swamps or marshes in the neighborhood, but there is a creek which flows through the ravine, which divides the surrounding hills.

2. Its proximity to Washington and its salubrity were the probable motives of the choice of site.

6, 7. It was reported by the surgeon that a thorough inspection had been made on enlistment, and that seventy-five had been rejected. No order had been received for re-inspection.

12. There is one surgeon and one assistant, father and son, who were appointed by the colonel, and have not been examined by any medical board. The * * * * informed me that the former had been a barber in * * * *, and an occasional cupper and leecher, and had no medical degree. The son's medical education was also doubted. Both had evidently failed to obtain the full confidence of the regiment. On examining the file of prescriptions at the hospital, I discovered that they were rudely written, and indicated a treatment, as they consisted chiefly of tartar emetic, ipecacuanha, and epsom salts, hardly favorable to the cure of the prevailing diarrhoea and dysenteries.

While remaining to dine in camp, the regiment returned from the city, whither they had been marched to receive at the arsenal a supply of new muskets. Sometime after, a messenger came in declaring that many of the men had been left on the roadside where they had fallen exhausted with the heat and fatigue. Great excitement ensued in camp, and complaints were uttered against the colonel for having marched his men during the heat of the day, when the march might have been postponed, as its motive was not pressing, until the evening. The chief surgeon, who had remained in camp, started out to find the men who had been left behind. I followed soon after, and had not proceeded very far on the road when I met him returning to camp with his son, who had accompanied the regiment on its march. The

* These numbers refer to the printed questions of the Sanitary Commission.

latter, on being introduced to me by his father, said that there was nothing the matter with the men he had left behind him on the roadside but a little fatigue. I expostulated with him upon abandoning his men, and urged him, for his own sake, to return. He followed my advice, and on reaching the ground we found some forty men lying near the road. All were evidently greatly fatigued, and some half dozen were suffering from sun-stroke. With some whiskey and iced water, with which we had provided ourselves, we soon succeeded in reanimating the sick, and refreshing the rest. The chief surgeon, in the meantime, came back with a homeopathic medicine box, and began administering homeopathic doses promiscuously to the sick and well.

The two surgeons, father and son, are both Germans. The former can hardly understand a word of English, and must have great difficulty in making himself understood to many members of the regiment, one-half of whom are either Irish or Americans.

There seems some reason to doubt the competency of the surgeons of this regiment. I confess, however, that there was nothing found in the condition of the men decidedly to prove improper treatment. The number of sick was not large in comparison with that of other regiments. Six had been sent to the hospital at Washington; nine remained in the camp hospital; 60 or 70 were off duty in consequence of various ailments, and there had been no death in camp.

The general manner and conversation of the two surgeons were such as to make me distrustful of their intelligence and acquirements. My suspicion of their incompetency, however, is due chiefly to the information of * * * * *, who earnestly urged me to report what he stated. He was, however, unwilling that his name should be used, unless he should be guaranteed against all consequences likely to affect his position.

13. No provision for transporting the sick and wounded, save a single field-stretcher.

14. A supply of medicines from the United States Government, but complained of by the surgeon as not being of the right sort. There was some doubt expressed by one of the officers of the regiment, as to whether the surgeon was supplied with all the requisite surgical instruments. The latter, however, declared that he was fully provided at his own expense.

16. The common or A tents in use, with six and often seven occupants to each. They were arranged too closely together, being not more than a foot apart. Many of them had bowers of dried bushes in front as a protection against the heat of the sun. This, however, appeared to intercept the air, and to be unfavorable to proper cleanliness and ventilation. All were trenched, and some floored.

17. Privies at a good distance, properly constructed, and not offensive to those in camp. On inspection, however, it was discovered that the earth was not thrown in regularly, and no disinfectants used.

18. The hospital was provided with a sink especially for its patients.

The men are said to bathe about once a week, but under no systematic arrangement. Many are unprovided with a change of under-clothing. There was, however, a good provision for washing, in respect to laundresses, there being several women to each company. I saw more women in and about this camp than I have seen in all the others together. The colonel had his wife, one lieutenant his, many of the soldiers theirs, &c.

19. No re-vaccination.

20. No varioloid or smallpox.

22. Parasites said to be rare.

23. No deaths.

24. No systematic amusements.

25. No deodorizers or disinfectants used.

26. Army rations. Complaint made of the frequency of salt pork, it being served sometimes four days in succession.

27. No fresh vegetables supplied by the government, or by the men at their own expense.

28. No dried fruits.

29. Fresh meat two or three times a week.

30. Water from springs; good.

31. Hospital stores abundant; but utensils wanted, bed pans and cooking vessels.

32. No spirit ration ever issued. The sutler, however, sells spirits and lager-beer *ad libitum*. The * * * of the regiment informed me that drunkenness was so prevalent that 25 or 30 men were sent daily to the guardhouse in consequence.

33. Two cooks to each company appointed by the captain.

34. The apparatus for cooking is a simple shallow trench, or two lines of brick. No lids to the cooking utensils, not even to the coffee-boilers.

35. Good bread from the city, but eaten "fresh, and often hot." Complaint of occasional meagre supply.

36. Uniform good, but too warm for the season. Each man had been supplied by the United States Government with a single pair of linen trousers.

37. Flannel underclothing worn, but often without change.

39. No india-rubber cloths. The men lie either on straw, hay, or bare ground.

40. The horses picketed at a good distance outside of the camp, and the manure removed.

43. The tents drained by means of deep trenches.

ROBERT TOMES.

JULY 5, 1861.

***th Regiment of * * *, 690 men ; Col. * * * ;*
25 days in camp.

Site upon a high hill.

1. Drainage from inclination of surface, good ; subsoil clayey. Exposed to the influences of a creek and dam, but no bad effects observed.

2. Selected for salubrity and military convenience.

6. No examination before enlistment. Partial inspection since, according to general order, and eighteen rejected, among whom was a man in an advanced state of pulmonary consumption.

11. The most perfect hospital organization yet observed—provided with a steward and two matrons, where female tenderness and care were evident in the kindly treatment and good order of the patients.

12. A surgeon and assistant surgeon, appointed in the usual way of the volunteers, through influence of colonel, and subsequently confirmed by a medical board.

13. One ambulance supplied by * * * * * *
 * * , and one horse-litter by the Government. The latter badly constructed, and pronounced by the surgeon to be useless. It is made for two horses, with a shaft in front and one behind. The irregular action of the animals and their necessary restlessness would appear to justify the surgeon's condemnation.

14. A deficiency of surgical instruments, there being but one amputating case and one pocket case for the two surgeons, supplied by the United States Government.

15. No sun-stroke and no endemic disease.

16. Common tents, mostly floored. Eight occupants to each.

17. Trenches dug for privies, but no cross-bars for support ; very offensive ; no earth thrown in, and much too near camp. No disinfectants used.

18. Frequent bathing, but infrequent washing of underclothes.

19. Vaccination in progress. I saw the surgeon thus employed.

20. One case of small-pox sent to eruptive hospital of Washington.

21. Thirty-eight cases of measles. Mild, and no serious sequelæ observed.

22. Some cases of diarrhœa and dysentery. Body lice on some of the men. Tincture of larkspur used, but found ineffectual ; probably of bad quality.

23. One death from drowning.

24. No systematic amusements, but men cheerful.

25. No disinfectants used, and not demanded by the surgeon, on the score that the bulk required would impede marching.

26. Ordinary army rations. No complaint of quality and quantity.

27. No vegetables, except those supplied by the men at their own expense. I saw cabbage and potatoes in use, here and there.

27, *b*. The surgeon has no anti-scorbutics, but would wish to have them, as he attributes the diarrhoeas and dysenteries to scorbutic influences.

28. No dried fruits.

29. Fresh meat three or four times a week.

30. Water good, from springs.

31. Medicines and hospital stores good.

32. No spirit ration issued, and the sutler discharged for selling liquor.

33, 34. In the cooking department all is rude. A *good captain* has, however, made an attempt towards improvement. He has provided his company with an ordinary house cooking-stove, but he makes the mistake of changing his cooks, who are selected from among the men. This company, however, is comparatively much better off than any of the others, and by its saving of rations and acquired handiness was enabled to provide a banquet on the Fourth of July, at the expense of the members, to which the whole regiment was invited. This company's street and tents gave evidence, by extreme cleanliness and well-ordered condition, of the excellent superintendence of the captain, to whose high character the surgeon bore strong testimony. The culinary utensils being without covers, were complained of by the cooks. Three cooks to each company.

35. Bread good, and from the city.

36. Uniform *worthless*.

37. Good and abundant underclothing.

38. Shoes good.

39. Blankets and overcoats bad. No india-rubber cloths.

42. Refuse food sold.

43. Tents surrounded with trenches.

ROBERT TOMES.

***th Regiment* * * * ; 787 strong ; *Colonel* * * *

1. The situation of the camp is upon a fine plain, intersected by occasional ravines, terminating in salt meadows and sea-shore. The natural drainage excellent. The camp is perhaps one-fourth of a mile from the beach, and between it and the water there is a comfortable house, which affords good hospital accommodations, and quarters for quartermaster and chaplain.

2. Both military and sanitary considerations seem to have been well answered in the selection.

7. The regiment arrived here with 851—the present number, 787. No order has been received from headquarters for a re-examination. The number of men sent home for physical disability is thirteen.

10. No orders have been received in reference to sanitary condition of the men.

11. A regimental hospital has been organized, with a steward and one nurse permanently detailed. The appearance of the rooms and patients do not indicate an energetic administration. The men lie on mattresses upon the floor, with no linen, no sheets, or pillow-cases. They lie in the same clothing, even under-garments, with which they left New York. I believe there is no substitution of hospital comforts for the usual rations. Fortunately, the number of regular hospital inmates is small.

12. One surgeon and an assistant are attached to the regiment, who were appointed by a Medical Commission at Albany.

13. The regiment has only one ambulance—an excellent one—and one field stretcher, besides those attached to the ambulance.

14. A medicine chest and a hospital case were furnished by the State of New York. A surgical knapsack is needed, as are many other important appliances.

16. The encampment is perfectly free from any unpleasant odor. The cooking places are neat, and no garbage is seen. Surface drains have been cut in every direction necessary to remove all surface water, except in one or two places, which were to-day being attended to. The tents are all floored, and the boards are kept clean, while the clothing, knapsacks, arms, &c., are arranged so as to present an appearance of tidiness and comfort. The officers are supplied with a tent called the "Crimean." Eight wedge tents, three "Sibley," and one "Crimean," are the supply for a company. Ten men occupy one of the wedge tents, and are undoubtedly too crowded. There is no order as to the closing of tents at night. They are closed or not according to the inclinations of the men. They sometimes sleep on the ground. The officers seem quite awake to the necessity of camp police.

17. The sinks for officers and men are formed at such a distance from camp as to be unobjectionable. The one belonging to officers seems to have been properly attended to by a fresh layer of soil daily thrown upon the surface. The one for men has been prepared with reference to such case, but seems not to have been quite properly attended to. However, the order was promptly given in my presence to secure the requisite attention. The men are strictly confined to the use of the sinks. A sink for garbage is also prepared and used.

18. There is excellent bathing upon the beach, which the men generally are inclined to enjoy; but the adjutant informed me that as all are not so, the acting colonel has issued orders to form the companies into squads for the purpose, so that each man will be compelled to wash at least twice a week. The men look bright and well, and seem to be in excellent health and spirits.

19. The men have all been re-vaccinated.

20. There has been no varioloid or smallpox.

21. There have been three cases of measles.

22. There have been no cases of intermittent fever. The men have been somewhat troubled with vermin.

23. There have been seven deaths, all either in battle or from wounds.

24. No attention seems to have been given to providing amusements for the men. Before the weather became so warm they sometimes played at "foot ball."

25. No disinfectants have been used or found necessary.

26. The regular army ration is received from the quartermaster of the post, and is of excellent quality.

27. Fresh vegetables have not been supplied to any amount. They cannot at present be obtained in this vicinity. No case of scurvy has occurred. The system of the company fund has not been carried out, except in a few cases. Some of the companies live well, and always have plenty, while others are always in want. It is not uncommon for a company to be entirely out of certain articles a day or two, at the end of the ten days for which the rations are issued. Others have a plentiful supply. The reason of the difference is in the varying skill of those who have charge of the cooking and the administration of the stores after they reach the company. The captains are, it is believed, mainly in fault, either from want of ability or from indolence; although it is easy to perceive that one faithful and industrious officer may not be able to prevent the effect of a want of those qualities among those under him. I wish still to pursue this line of investigation, both in this and other regiments. One thing seems pretty certain in this case, there is no want of promptness or faithfulness in the quartermaster's department, and no deficiency in the quantity or quality of the food furnished. There have been no extra issues of anti-scorbutics.

28. Dried fruits have not been issued.

29. Fresh meat is supplied three times in ten days.

30. The water is quite good, but not entirely free from qualities injurious or disturbing when taken in large quantities.

32. No spirit ration is issued.

33. The cooks are sometimes hired by the companies; in other cases they are detailed from the ranks.

34. The apparatus used for cooking is the open fire beneath kettles suspended by hooks from an iron bar.

35. The soft bread, which is excellent, is supplied every other day from the post bakery.

36. The men were supplied with one suit of clothing from the State of New York, but with no change of underclothing.

37. The regiment has never been supplied with a change of underclothing. Not only in the case of this regiment but of all in the neighborhood, the want of underclothing is likely to be productive of great suffering and loss of efficiency.

38. This regiment is well supplied with overcoats, blankets, and rubber blankets.

39. The average age of the men is about twenty-five years. There are but few over thirty, and only two less than nineteen.

I have ascertained that the men of this regiment have not yet been paid for their services from the time they were accepted by the State

of New York until they were mustered into the service of the United States. This is a great shame and hardship, as they have yet received no wages from Government, and many of them have no means with which to procure any comforts at their own expense.

The chaplain and other officers are receiving great numbers of letters from friends of men in the ranks enquiring about them, and from many others on the *business* of the *writers*, all of which, though prepaid, require stamps upon the answers. These gentlemen not receiving their pay from the State or the Government are having their pockets drained of their scanty supply of money in this thoughtless manner.

The "havelocks" seem to be of little use; they are soon laid aside. A supply of white cotton gloves is desirable, to protect the musket from rust, from being handled with moist hands.

But of all the sufferings of our brave volunteers, the one most terrible seems to me that of being confined in hospital with the same filthy clothing that they have worn through all their hot marches, rolled in the blankets that have served them since their enrolment.

The poor fellows of * * * * have not had even blankets since June 1st. About 400 blankets are wanted there.

E. J. DUNNING.

Memorandum of Professor F. H. Hamilton, Surgeon of 31st Regiment, N. Y. S. V.

We have about 850 men. Two companies are composed mostly of Germans, men accustomed to out-door work; three quarters of the remainder were out-door laborers. We are situated on Park Heights, with an abundance of pure water and of air. No malaria. Since we encamped at this place, a period of about ten days, we have had no vegetables, except once or twice a few onions. The meats have been excellent, but generally salt. We have now a daily report of about fifty cases of diarrhoea and dysentery, which are steadily increasing. The camp is perfectly clean, and the latrines are covered daily. We have no drills between 9 or 10 o'clock a. m. and 5 p. m. The Germans who drink "lager" furnish the fewest cases of diarrhoea. Indeed, those who can get lager are seldom reported. I allow one quarter cask of lager to every 24 men per day. The men subscribe for it under directions of the captains. The Germans are accustomed to drink much more per day, but this answers the medicinal purpose which I have in view. It regulates the bowels, prevents constipation, and becomes in this way a valuable substitute for vegetables. I encourage all the men to take it moderately, but most of them have no money to pay for it.

Whiskey, brandy, and the wines, unless I except clarets, vin ordinaire, &c., are, I think, pernicious.

FRANK H. HAMILTON,
Surgeon 31st Reg., N. Y. S. V.