

Head-Quarters Medical Director's Office,

ARMY OF KENTUCKY,

LOUISVILLE, September 23d, 1862.

The following instructions are published, to be observed and enforced by the Medical Officers of this army:

OF THE DUTIES OF SURGEONS ON THE MARCH.

When the order for march is communicated to the Surgeon—and this should be as early as possible—the Surgeon should give his attention to the following particulars:

I. He should direct his principal stores and equipments to be snugly and securely packed in his transport wagon; care being taken so to arrange the loading that easy access can be had to those articles most apt to be needed on the way without disturbance of the whole load. It is well to give the hospital attendants some practice or drill in this matter, so that in emergencies they can perform their duties with dispatch.

II. He should inform himself at once as to the number of the sick to be left behind and the number to be transported. The determination of the number to be left behind in camp or sent to general hospital will be influenced, amongst other things, by the nature of the service into which the command is ordered, and the circumstances in which those left will be placed. If the command is in an enemy's country, the Surgeon must take the order of his commanding officer. If any are to be left behind, provision must be made for their food, quarters, and medical attendance. The number to be carried along with the command and requiring transportation having been ascertained, if that number is greater than

can be transported in the ambulances, application must be made for additional transportation. In providing transportation, reference must also be had to the contingencies occurring on the march. Men get injured and give out on the march. As a general thing, it is desirable to move as few disabled men as possible. So many men become disabled on the march that the available transportation is always taxed to the utmost, so that it needs to be husbanded with great care. Surgeons must bear in mind that in usual marches no men should be left behind who will be likely to be fit for duty in a week. Many Surgeons are in the habit of leaving at every available point all the sick of their regiments, and finally regard their duties as being more to designate what patients are to be left behind, or to be sent to general hospital, than to treat the sick of their regiments.

III. He should see that the hospital knapsacks are filled with those medicines, instruments, and dressings which the service may call into requisition, and that each of these knapsacks is carried by a hospital attendant, one of whom attends upon each of the Medical Officers.

The medicine chest may be carried in one of the ambulances.

IV. He will see that the water kegs are in good order and filled with water.

V. The ambulances, the commanding officer consenting, should move directly in the rear of the regiment or corps.

VI. When men become disabled on the march, they are presented to the Medical Officer under such regulations as the commanding officer may prescribe. It is the duty of the Medical Officer to examine as carefully as possible the men thus brought to his notice, and he will determine whether the disability is feigned or real, and give them admission to the ambulance if they need it, for such time and in such way as he may think most advisable. The ambulances should be frequently inspected, to see that no one occupies them without the proper authority. Surgeons will be called upon to exercise great discretion and firmness in this matter. No officer should be allowed to ride in an ambulance unless by reason of disability: any deviation from this rule

should be by the express order of the commanding officer. The ambulances are provided for the sick and disabled.

VII. The Medical Officers should always march with the command. Their services may be needed at any moment. The Surgeon should occasionally allow the column to pass him, so that he may be enabled to advise his commander as to the condition of the men. The post of the Regimental Medical Officers is in the rear of their regiment.

VIII. It is well that the men's canteens should be filled before the march, and, as the halt is commonly made at a watering place, the canteens should then be re-filled. This matter is in the province of the line officers. If it is attended to, the men, by drinking *a little and frequently*, march much better. *Large draughts* of water are not only *dangerous* in their immediate effects, but are *enervating*.

IX. Some cooked food should always be carried in the ambulances, for disabled men need food more frequently though in less quantities than well men. A good supply of whisky should be on hand, but must be allowed with careful discretion. As a general thing, a pill of opium will be found available and useful for many contingencies, and this, if carried in the pocket of the Surgeon, will be found exceedingly convenient.

X. As soon as the command encamps, the sick and disabled should be conducted or reported to the Surgeon to the end that he may prescribe for them, and advise his commanding officer as to the transportation needed for the next day's march; and if it is found that there are some men whom it is not well to move any further, provision must be made for their subsistence, quarters, and medical attendance, or, if they are to be sent to the rear, for their transportation.

XI. When men are to be left behind on the march, those who are in the hospital are to be provided with subsistence on the requisition of the Surgeon. Those who are in quarters are supplied by the company commander upon notice by the Surgeon. Quarters are provided by the Quartermaster, details of guards by the commanding officer. And when a number of men are left be-

hind sick in quarters, a commissioned officer of the line will be left with them in command of convalescent camps or barracks. The Surgeon left in charge had better be so left by order of the commanding officer. All of these arrangements should be made as soon as possible after encamping, for in the hurry and confusion of the morning there is great difficulty in making the necessary provision. The Medical Officer left in charge of the sick should, as soon as the command moves, visit the camps to see that all the men are got together. A list of the men; their rank, company, and regiment, should be reported to him in order that he may see that no one has been overlooked; and it must always be borne in mind that whenever a soldier is separated from his command, and especially when sent to a general hospital, he must be furnished with a descriptive list and an account of pay and clothing. When troops march in large bodies, by brigades or divisions, the Surgeon of the brigade or division should give direction to the Surgeons of regiments in regard to the disposition of the sick. The sick should in such cases be gathered from the different regiments or corps, and massed as far as practicable. By this arrangement fewer officers will be required for the care of the men.

When the encampment is within reach of general hospitals, inquiry should be made of the Medical Officer in charge of them as to the spare beds for the reception of patients. The men should never be forwarded, unless in very urgent cases or circumstances, without this preliminary inquiry. By neglect of it, the sick are often crowded into hospitals having no adequate room or provision for them. In such circumstances the men can be better cared for and their cases treated more successfully in the encampments. In all cases where the sick are forwarded to general hospitals, due notice should be sent *beforehand*, specifying the number forwarded and the probable time of arrival. Proper attendants should always accompany the sick in transitu, and they should be provided with such medicines and food as they may need on the journey. In the selection of patients to be sent to general hospitals, Surgeons should exercise great circumspection to the end

that none are sent who are not able to bear the journey; those who can be properly cared for on the field are kept in the field. Many contingencies will arise in field service for which specific rules cannot be prescribed beforehand. In all such cases the Surgeon will advise his commander of the facts and ask his orders in the circumstances. Commanders are given a large discretion in such matters, and the order of the commanding officer is the sufficient warrant for the Surgeon's acts.

OF THE DUTIES OF SURGEONS ON THE FIELD OF BATTLE.

When before the enemy, the Surgeon should see that the Medical Staff is provided with all the appliances which will be needed in the action. To this end he will see that the hospital knapsacks are filled with the needful medicines and dressings; that the instrument cases are unpacked and distributed; that the stretchers and litters are at hand; that the ambulances are on the ground and in good order (the ambulances are under the supervision of the Quartermaster or one of his authorized agents); that all the water vessels are filled, and that such food as may be required is prepared.

The men under his control for the various offices to be performed consist of the hospital attendants and the musicians of the regiment. The Assistant Surgeons are also under his direction. These men and officers should have their various duties assigned them. One of the Medical Officers accompanies the regiment; the other takes post with the Surgeon at the field hospital. One hospital attendant with a hospital knapsack attends upon each of the Medical Officers. The remaining hospital attendants, in connection with the musicians, are to be employed in transporting the wounded.

The position of the field hospitals is determined by the senior Surgeon present with the command. They are placed as near the line of battle as possible, and yet without the range of fire. For this purpose advantage is to be taken of inequalities of the ground, and screens of various kinds, as houses, haystacks, and

timber. Reference should be had in selecting sites for field hospitals to their accessibility by the ambulances.

Markers of red flannel should be placed when practicable so as to guide the wounded, straggling rearwards, to the posts of the Surgeons. When large bodies of troops are to be engaged, the Medical Director, with the Quartermaster, establishes depots for the wounded; and the Medical Director, moreover, distributes such Medical Officers to these depots as he may deem best.

It is of great importance in assigning Medical Officers to duty at depots that Surgeons of the most professional experience and ability are selected; the most important surgical operations are to be performed here. No amputations or other operations of importance should be made without the direction of the principal Surgeon in charge of the depots, and, even in the field hospitals, never should be made without consultation, except in cases where the necessity for the operation is unmistakeable, or the urgency of the case is such as not to admit of delay. The great and prevalent error of surgical practice in this war, so far, has been the performance of unnecessary amputations. There is hardly a case of gunshot injury of the upper extremity, except that of artillery injuries, which demands or admits of amputation.

Surgeons in the Direction of Medical Officers should see that all amputated limbs are *preserved for inspection*, for the reason that the part of the limb cut off will exhibit the nature of the injury, and will testify as to the necessity for the amputation as well as show how it was done.

It may not always be possible to comply with these instructions in the confusion and hurry of battle, but they will serve to indicate the general purposes to be kept in view. This is not the occasion to lay down rules of surgical practice. Surgeons are expected to have learned their art. Those who are found to be ignorant of it will be dismissed from the service.

POLICE OF TENTS.

The tents should be struck, the blankets and spare clothing should be aired at least once a week, and oftener if practicable.

The straw should be frequently aired and renewed, and in no case allowed to become mouldy.

No dirty clothes, no food nor cooking implements should be allowed in the tents. As soon as the soiled underclothes and stockings are removed, they should be washed and packed in the knapsack. Foul linen kept in the tents serves to contaminate the air in the tents.

Every possible caution should be exercised to keep the air in the tents sweet and pure.

This is to be effected in part by attention to the cleanliness of the persons and clothes of the men; but still more by attention to ventilation. Surgeons should remember that the vitiation of the atmosphere in tents is the prolific source of camp typhus. It is well to inspect the tents at night after the men have gone to sleep, and, if the air is found to be foul, the tent door should be thrown open, no matter how cold the weather.

PERSONAL CLEANLINESS.

The men should be compelled to wash the whole person at least once a week. The feet should be washed more frequently, and on the march every evening.

The underclothes should be changed once a week, and the stockings at least twice a week. The stockings should fit the foot closely, otherwise there will, in walking, be friction between the stocking and the foot, and the man will get foot-sore.

The men should frequently be inspected to see that they keep their persons clean and clear of vermin. The articles necessary to destroy vermin can be had on special requisition upon the Medical Purveyor.

FOOD AND COOKING.

It is necessary that as great a variety of food as is supplied by the Government should be afforded to the men. Potatoes, onions, and beans are issued from the Commissary Department when they can be had, and requisition for these articles will commonly be filled. One of the principal reasons why they

are not issued more frequently is that requisition is not made for them as often as it should be. It should be remembered that scurvy comes of lack of variety of food as well as badness of quality. If the ration is tolerably husbanded sufficient funds will accumulate to procure for the men every variety of food commonly supplied in the markets. The husbanding of the ration should be looked to and enforced as far as possible.

The cooking should be done by companies, not by messes. This arrangement facilitates the instruction of the cooks as well as the preparation of food, and tends to the husbanding of the ration and to greater neatness of the camp.

The food should *always* be *thoroughly* cooked. Beans require *five* hours for soup. Beans can be excellently cooked in camp kettles, set in trenches in which a hot fire has previously been made, and the kettles surrounded and covered with coals. Beef soups require at least three hours in cooking. If soups are palatable and well made, they constitute the best food for the soldier.

The practice of frying meats should be discouraged. Surgeons should constantly inspect the food of the men, and if they find that cooking in all its details is not properly done, the fact should be promptly reported. Commanders of companies are directed by Army Regulations to see that the cooking is properly done. The duty of the Surgeons is to *inspect* it, and if found faulty to report it. They should also have an eye upon the sutlers' stores and upon peddlers about the camps, to the end that no injurious articles of food or drink are sold to the men.

OF SINKS.

Immediately after encamping a detail should be made for digging sinks.

The sinks for the men will, when practicable, be five in number—one for each two companies and two for the officers.

Those for the men should be placed one hundred and fifty paces in front of the color line; but where the situation of the encampment renders this impracticable or objectionable, they may be placed two on each flank or in the rear. The sinks for the

officers, which should always be distinct from those for the men, should be placed in the rear of the regimental staff tents. In all cases the sinks should be one hundred and sixty paces from the exterior row of tents.

The sinks should never be less than four feet in depth—six feet if possible—and as narrow as they can well be dug.

The sinks for the men should be 75 feet in aggregate length. Those for the officers should each be 12 feet long.

Poles, rails, or boards should be placed along the front edge of the sinks, so that persons using them may not get their feet soiled by standing in the mud made by the urine discharged in front.

Rests should be placed overhanging the front edge of the sinks, and these rests should not be more than fourteen inches in height. They should be fixed on stakes placed at frequent intervals and firmly secured, the whole structure being strong.

The sinks should be carefully screened so as to secure privacy for those occupying them.

The sinks should be so carefully policed at all times that no odor from them can be perceived in any weather at the distance of twenty paces.

The men and officers should be compelled to use the sinks, and any one caught depositing his excrements in any other locality in or about the camps should be punished.

A separate sink should be made for the hospital.

The reason for the above particular instructions is found in the fact that emanations from human excrements are the prolific cause of camp diarrhœa, when there is no epidemic influence prevalent amongst the men. But when typhus, or the tendency to typhus, is once engendered, the contagium is set free for the infection of the well men more abundantly from this source than from any other. The health of the men is more concerned in the management of the sinks than in any other one particular incident to camp life.

The reason for digging the sinks deep and narrow is this: The decomposition of animal matter is greatly facilitated by the

presence of light and the free access of air. The deeper they are the less the access of air, and the narrower the less the entrance of light.

As soon as the sinks have been filled within eighteen inches of the surface, they should be covered in with earth, and new ones dug.

POLICE OF GROUNDS.

The grounds upon which troops are encamped should be kept clear of all rubbish and filth—of filth because it breeds disease, and of rubbish because this, lying about the camp, prostitutes the sense and destroys all appearance of neatness. All bones, bits of meat, bread, and ordure should be buried, or removed to a distance from the camp.

Deep pits should be dug adjacent to the company kitchens for the reception of all kitchen offal and slops. These pits should be kept carefully policed, and should be covered in with earth before they are quite filled with garbage, and new ones dug. Excrements, when found on the grounds, should be taken up and deposited in the sinks. The company streets should be swept daily.

The company kitchens and cooking utensils, the kitchens of officers and the whole grounds within the encampments, should be frequently inspected by the Surgeons, and the condition of them reported to the regimental commander if necessary. Care should be taken that the company streets are at least as wide as prescribed by the Army Regulations.

DRAINAGE.

When encampments are on sloping grounds, head ditches should be dug on the up-hill side of encampment, so as to direct the surface water by the flanks, or conduct it through the camps confined to narrow channels. Ditches should be dug all around and close to the foot of each tent. These ditches should be shaped, one foot deep, and in front of the tent door should be bridged over. The ditches around the tents should be connected with drains running in such direction as may be demanded by the surface of

the ground, and sufficient to permit the easy escape of the water. The earth removed from the ditches should be thrown in the middle of the company streets, so as to make them convex, or else it should be carted outside of the camp.

These drains and ditches should be kept free and clean, and the more tenacious the soil the deeper they should be.

CERTIFICATES OF DISABILITY.

Great care must be taken in making certificates of disability. No enlisted man is to be discharged from the service except for a cause which renders him permanently unfit for duty. For the purpose of ascertaining the existence of such a cause, the Surgeon should carefully examine the man. In making this examination, the Surgeon is to be careful not to place too much reliance upon the statement of the soldier; he will guard himself against deception. The ingenuity occasionally practiced in order to induce the Medical Officer to give a certificate of disability is marvelous; one man has been detected in this department in lacerating his tonsils in order to make out a show of hæmoptysis, and another in mixing albumen with his urine to make out a case of albuminaia. The Surgeon should also admit, with suspicion, the statement of a third person, who by any chance might be a party to the deception. In short, the Surgeon should, in giving a certificate, speak out of his own personal knowledge. It is not safe to give the certificate on any other evidence.

The reason of the disability stated in the certificate should be conclusive. If the disease causing the disability is such that it may not in general be a cause of disability, then the circumstances of the particular case must be stated. For instance, a fracture of the femur may or may not be a cause of disability. If the fracture has healed without material shortening, it is not. To be a cause, the fracture must have resulted in permanent and material lameness, unfitting the soldier for the march. A fracture of the femur with very slight shortening may be a cause for rejecting a recruit, but not for discharging a soldier. Such a recruit may be rejected because of an injury rendering him liable to rheu-

matic pains, &c. But a soldier is not to be dismissed from the service because he may at some time or in some contingency be disabled. The disability must be present. Again: a man with *fistula in ano* would be rejected if offered as a recruit; but he should not be discharged for that cause, unless it appears that the fistula is incurable. The Government is entitled to the service of a soldier if he is curable; the man is entitled to the treatment of his case if there is chance of cure; but if there is no probability of a cure within a reasonable period, then it is better for both parties that the man be discharged.

The cause of the disability must be plainly as well as accurately stated—plainly because the certificate will be acted upon by officers who are not surgeons—accurately because the certificate must set forth all the considerations which influence the mind of the Surgeon granting the certificate.

When the disability arises from injury or other causes, by reason of which application might be made for a pension, then the certificate must set forth all the facts within the Surgeon's knowledge bearing upon the granting of the pension.

It will state, if possible, whether the disability existed in part or in whole prior to enlistment. The man's admission would be sufficient evidence of the pre-existence of the disability. At dates not far removed from that of the enlistment, the state, appearance, or progress of the disease might throw some light on the question. Thus a considerable hernia is commonly the growth of many months.

If the disability has accrued since the date of enlistment, then the Surgeon should state if he knows (*belief is not sufficient*) whether at the time of receiving his injury the soldier was engaged in the discharge of his duties; a man accidentally shot in a brawl does not have the status of one shot in battle.

If the disability was caused while in the discharge of duty, and will probably be a case for pension, then the certificate must set forth the degree of the disability. Thus: If the man's labor was worth one dollar per day before the injury, and the man can earn 75 cents per day after the injury, it amounts to one quarter;

if he can earn only 50 cents then his disability is one half, and so on.

The certificate must be in duplicate; it must contain also the Captain's statement of what facts he knows bearing on the several questions indicated above.

The man will in the next place be examined by the next superior Medical Officer, or by a Board of Examiners, as may be the order governing the matter. On re-examination, the certificate of the Surgeon is approved or disapproved, as may be determined. The certificates must have the approval of the line and medical officers in the order of their rank.

OF THE MORNING REPORTS.

Morning reports are made for the information of commanders.

The commander of the force needs to be kept constantly informed of the number sick in camp and unfit for duty. He needs this information in order that he may know how many men would have to be left behind in case of a march or engagement. He wants to know the number excused from duty in order that he may see if any men have been excused from duty on account of sickness by any other than the Medical Officer. He needs information as to the condition of the sick, whether they are in hospital or in quarters, to the end that he can issue the proper orders for their care or removal; and he needs to be constantly informed of the sanitary status of his command. The regimental commanders must be furnished daily with the report setting forth these facts in regard to the different companies as well as to the totality of the regiment.

The brigade commander needs information as to the same facts, and for like purposes in regard to the regiments and corps in his brigade. The division commander in reference to the brigade. The army commander in reference to the army.

Regimental Surgeons report the totals of the morning regimental report to the Surgeon of the brigade.

Brigade Surgeons report the total of the several regimental reports to the Division Surgeons

Division Surgeons report the totals of the several brigades to the Medical Director of the army, if the army consists of two or more divisions.

These reports should be made at the same hour at which the reports of the several Adjutants are made.

When the nature of the service permits, these reports should be made with the utmost punctuality. They are the essential prerequisites of so many important orders and measures that they can never be neglected without detriment to the service. Without the information which these reports impart, it is impossible to give the necessary instructions or make the necessary provision for the sick and disabled.

In making medical certificates on which officers base an application for leave of absence, if the leave of absence asked is to go out of the lines of the army or beyond the limits of the department, the certificate must set forth the fact that such removal is necessary to the recovery of the health of the applicant. It is not enough that the applicant is unfit for duty, and will be unfit for a certain time; his condition must be such that a change of air or of some other circumstances are essential to the safety of life or the prevention of permanent disability. The general orders govern the rigidity of this rule. The medical certificate states the medical reason, no other. Medical Officers will always bear in mind that all their official statements are made on *honor*, and they will therefore see the necessity of guarding themselves from favoritism to officers or men. The order making it necessary that the Surgeon next in rank above the Medical Officer giving the certificate should re-examine the applicant was doubtless made to guard against this abuse as well as to correct errors in judgment, and secure form and completeness in the certificate. As a general rule, no personal examination of an applicant is made except by the Surgeon giving and the one first approving or disapproving the certificate; therefore the applicant should report in *person* with the certificate to the first Medical Officer approving or disapproving the certificate, and to no other.

OF SICK CALLS.

At the sick call, which should be at an early hour, the sick

are conducted or reported to the Surgeon; those who are able to walk are conducted; those too ill for this are reported. Each company Sergeant, at the call of his company, presents himself with the sick and also his company book with a list of the sick. On this book the Surgeon marks against the name of each man presented whether he is excused from duty or not. The degree of duty, if any of which he is capable, and designates the place each is to occupy in hospital or quarters. He also marks of those remaining at last report, those who are to be returned to quarters or to duty. It is to be remembered that no one can be excused from duty on account of sickness, or of the sick can be put on duty, except by the Surgeon's order. To this end he will see that after morning call no sick men, able to report to the Surgeon, are prescribed for, except in urgent cases, without being accompanied by the Orderly Sergeant. This rule should be rigidly enforced for the sake of the soldier; and in the interest of the service. A Medical Officer will proceed to the tents to visit those unable to report in person, and dispose of them as their cases require. Orderly Sergeants, it will be remembered, cannot excuse a man from duty except upon the written order of the Surgeon, and therefore the Surgeon's order must always appear in the company book.

When it happens that the commander neglects to issue orders which the Surgeon regards as of vital importance to the health of troops, the Surgeon should notify his next superior officer in his own corps of such neglect, accompanying this notice with a copy of the official communication made to the commander. A copy of the notice sent to his superior Medical Officer should also be served on the commander. This latter is not required except as an act of courtesy.

In carrying out the provisions of this circular, Surgeons will remember that in many of its particulars the functions of the Medical Officer are merely advisory. Medical Officers do not *command except in their own department*. Surgeons give orders to their inferiors in their own corps. They prescribe the duties of their assistants; they order their hospital attendants; they control patients while in hospitals; they have all needful authority for the

care of the sick; they *advise* their commanders as to those things which relate to the health of their commands; for instance, they may advise as to the necessity for the institution of sanitary police measures. They advise as to the institution of any measures or regulations necessary for the maintenance of health or removal of causes of sickness possible, probable, or present. The commander orders the execution of the measures recommended, not the Surgeon. The Surgeon gives his personal attention to all events and conditions which concern the health of the command. He reports all the facts which the commander needs to be advised of, so as to correct errors in sanitary regulations. Thus he reports that the location of the camp is insalubrious; that the cooking is not well done; that the food is unsound; that the sinks are not policed or properly placed; that the tents are not ventilated, &c. The commander gives the orders necessary for the correction of the evil.

These instructions are issued for the information of Surgeons new to the service, and are intended to embrace only those points which, in the experience of the volunteer service during the past year, instruction seems to be most needed. Surgeons will soon learn all the common details of duty if they will diligently study the Army Regulations, and it is expected that they will find their superiors always ready to aid them in the study.

Respectfully,

M. GOLDSMITH, Surgeon U. S. Vol.

Medical Director Army of Kentucky.

LOUISVILLE, Sept. 16th, 1862.

By order of MAJOR GENERAL W. NELSON.

C. H. BUFORD, A. A. G.