

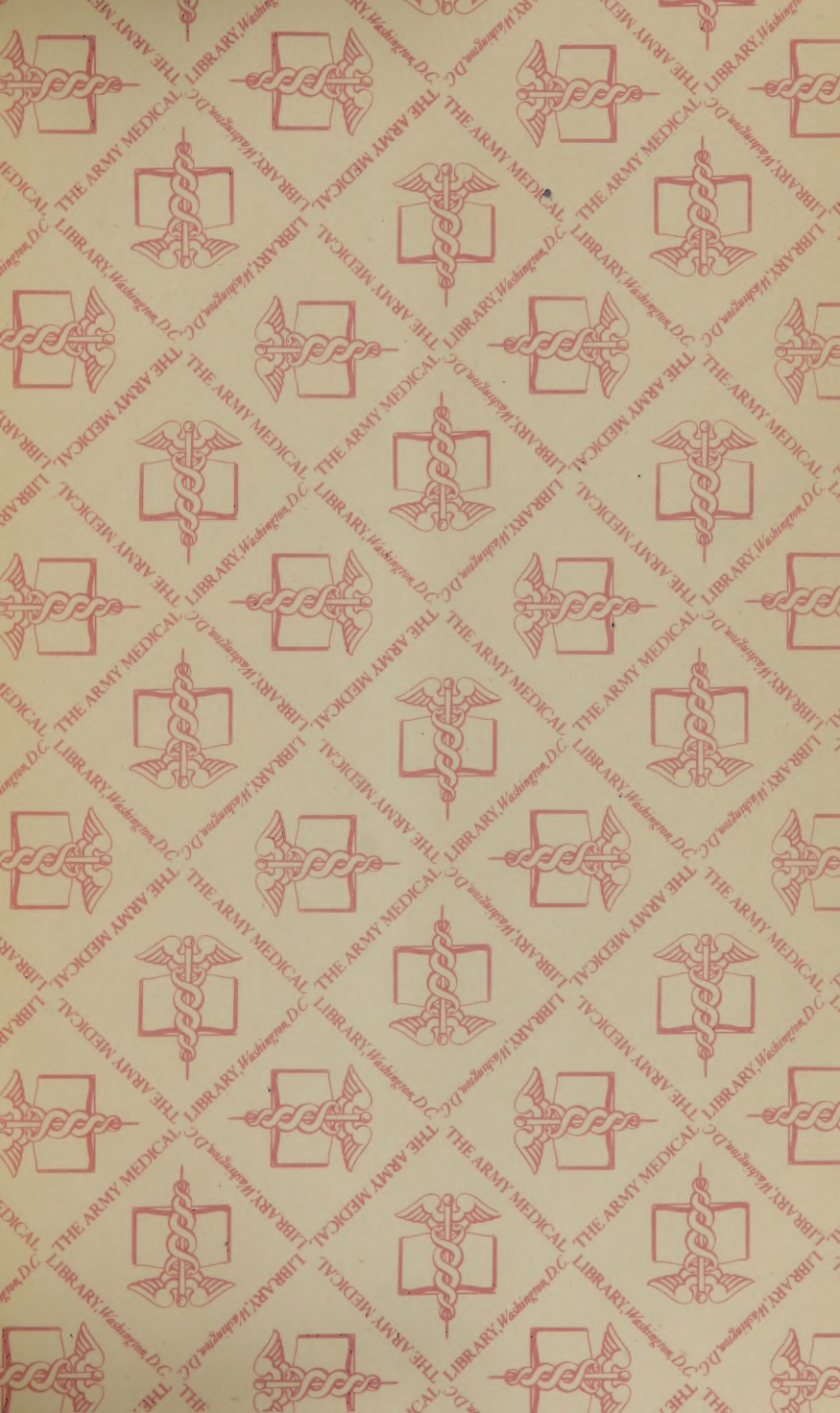
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*Dr. Colwell
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United States SANITARY COMMISSION, No. 40.

A REPORT TO THE SECRETARY OF WAR

OF THE

OPERATIONS

OF THE

SANITARY COMMISSION,

AND UPON THE

SANITARY CONDITION OF THE VOLUNTEER ARMY,

ITS

Medical Staff, Hospitals, and Hospital Supplies.

29139

DECEMBER, 1861.

WASHINGTON, D. C.:

McGILL & WITHEROW, PRINTERS.

1861.



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REPORT.

WASHINGTON, *December 9th*, 1861.

To the Honorable SIMON CAMERON,

Secretary of War :

SIR : By direction of the Sanitary Commission, I respectfully submit the following report of its operations since its appointment by you, on the 9th of June, 1861, pursuant to the recommendation of the Acting Surgeon General, under date of May 22, 1861 :

ORGANIZATION AND DUTIES.

By your order appointing the Commission, it was vested with no legal authority, and with no power beyond that of "inquiry and advice in respect of the sanitary interests of the United States forces." It was directed, especially, to enquire into "the principles and practices connected with the inspection of recruits and enlisted men ; the sanitary condition of the volunteers ; to the means of preserving and restoring the health, and of securing the general comfort and efficiency of troops ; to the proper provision of cooks, nurses, and hospitals ; and to other subjects of like nature."

The Commission has, from the first, fully recognized the fact that its office was purely auxiliary and advisory, and that it

was created solely to give what voluntary aid it could to the Department and the Medical Bureau, in meeting the pressure of a great and unexpected demand on their resources.

The Medical Bureau especially, organized with reference to the wants of an army of only a few thousand men, seemed likely to be most seriously embarrassed in its operations, when called on to provide for a newly levied force of several hundred thousand, especially as both the officers and men of these hastily assembled regiments were mostly without experience, and required immediate and extraordinary instruction and supervision to save them from the consequences of exposure, malaria, unwholesome food, and other perils of camp life.

The Commission met for the first time at Washington, on the 12th June last, and proceeded to organize and to settle, so far as was then possible, the general scheme of its operations.

PRELIMINARY SURVEY.

For the purpose of a preliminary survey of the ground, the President of the Commission, Rev. Henry W. Bellows, D. D., immediately undertook an examination of the sanitary condition of the troops assembling at Cairo, St. Louis, and other military centres in the west, and a like preliminary examination was made by other commissioners into the state of the troops on the Potomac and at Fortress Monroe. Full reports of the results thus ascertained were submitted to the Commission, showing that the apprehensions entertained of dangers to the army from the neglect of the most obvious sanitary precautions, in regard to camp site, ventilation, drainage, &c., and from the general ignorance of officers and soldiers in regard to this subject, and in regard, also, to the forms of procedure to which medical and other officers are obliged to conform, in order to obtain supplies from the regular military sources, were in no degree exaggerated, and that there was a

vast field of work before the Commission, which Government could not, for the time being, fully occupy, but which could not be neglected without imminent risk of great public loss, and national calamity.

FINANCIAL BASIS.

As the Commission was to receive no pecuniary support from Government, it was under the necessity of calling on private liberality for the fund it required to sustain it. Its appeal for this purpose was responded to with promptitude and liberality, and the Commission was thus enabled to go into operation without delay. The Life Insurance Companies of Massachusetts, New York, and New Jersey, were most generous in their contributions—one of the number (the Mutual Life Insurance Company of New York) having given five thousand dollars to the objects of the Commission. It has received in money from all sources, up to the 25th of November last, twenty-eight thousand one hundred and seven dollars, (\$28,107,) the larger portion of which has been contributed by citizens and institutions of New York. Whether public liberality can be depended on as a permanent source of supply is uncertain. Should it fail, the Commission will be under the necessity of terminating its labors, unless Government should see fit to assume its support.

ADVICE.

The Commission found itself charged with a two-fold duty, viz: of enquiry into the sanitary condition of the volunteer army, and of advice as to its improvement. This latter function included not only the duty of addressing to different departments of Government, from time to time, such recommendations or suggestions as occasion might suggest, but also that of keeping volunteer officers and soldiers themselves constantly and directly

instructed and warned as to the novel dangers to which they were exposed, the necessary precautions against them, and the means pointed out by experience as best calculated to preserve them in bodily health and vigor for the performance of their duty to the country.

For this purpose the Commission proceeded, as speedily as possible, to secure the services of a body of physicians specially fitted for the required duty, and to send them into the field at various points from Fortress Monroe to St. Louis. In this it was retarded, not only by its limited means, but also by the difficulty of finding at once a sufficient number of gentlemen of the requisite qualifications. It was indispensable that they should possess not only scientific education and a special acquaintance with sanitary laws, but sufficient tact to enable them, though holding no official position or military rank, to perform their duties as agents of an organization unknown to the regulations of the army, without awaking jealousy of their interference as officious and intrusive. It was also necessary, in view of the fact that the Commission could afford to pay but moderate compensation to its employees, that they should be men actuated by a strong and disinterested desire to be of service to the country.

Fourteen well qualified physicians are now employed by the Commission, each having a defined portion of the army under his observation. Six other gentlemen, each possessed of special acquirements, are engaged on special duties. A list of their names and of the posts to which they are respectively assigned is appended. It is proper to record the fact that they have in several cases withdrawn from positions far more remunerative than that now occupied by them, and have undertaken their present duty from motives of the highest benevolence and patriotism. Others have declined the office of Brigade Surgeon, tendered them by the War Department, to enter on what they considered a wider field of usefulness in the service of the Commis-

sion. No one is now employed on this duty who is not entitled, by education, experience, and social standing, to speak with a certain degree of moral authority; and whatever success the Commission may have attained in the execution of its duties, is believed to be due as much to the high character and intelligence of its Inspectors, as to all the other advantages it has enjoyed.

The duties of the Inspectors, beyond what has necessarily to be trusted to their discretion, are minutely detailed in the printed instructions issued to them, of which a copy is herewith submitted. It will be perceived that they are enjoined carefully to avoid whatever can excite apprehension of a disposition to interfere with military authority. Before entering any camp, they are required to obtain the formal approval of the Major General, the Brigadier General, and the Medical Director, in whose military jurisdiction it is included, together with an introduction to the commanding officer of the regiment, and through him to the company officers. Having done this, they are directed to make a minute investigation into every point bearing directly or indirectly on the sanitary condition of the camp.

Among the subjects to which their attention is especially directed, and on which they are required to make detailed written reports, are the quality of rations and of water, the method of camp cooking, the ventilation of tents and quarters, the drainage of the camp, the healthfulness of its site, the administration of the hospital and the sufficiency of its supplies, the police of the camp, the quality of the tents and of the clothing of the men, the material used for tent flooring, if any, &c., &c. Whatever deficiencies or evils they find to exist by which the health, morale, or efficiency of the men may be endangered, they are instructed to indicate to the proper officer, at the same time offering advice, if it is needed, as to the best method of remedying them. Very few camps have been visited in which important improvements have not been ordered, at the suggestion and in the presence of the Inspector.

The influence, however, which officers unconsciously receive through the mere direction of their attention to neglected duties, by the inquiries which the Inspectors have need to address to them, constitutes the chief part of the value of the services of the Commission. This, of course, cannot be specified and recorded. But the effect of the advice given by the Inspectors of the Commission is found not to be confined to the particular camp visited, or to the officers with whom they converse. The example of one regiment in reforming abuses and enforcing sanitary laws is very generally followed by others near it, and an emulation is excited among company and regimental officers, the beneficial effects of which have been noticed in many cases where an ill-regulated regiment has been transferred to the neighborhood of a cleanly, well-policed, thoroughly drained, and salubrious camp. (See Appendix: *Example*.) Men who have been flooded out of their tents in a rain storm, get little sympathy from their neighbors who have been instructed how to protect themselves by drains, nor are those who feel a natural and soldierly pride in the good order and cleanliness of their camp generally careful to conceal it when they enter a camp inferior to their own. There is no doubt that systematic attention to sanitary laws is becoming more generally understood to be a part of the duty of a military officer; and it is satisfactory to observe that the more recently enlisted regiments begin better than those enlisted at the opening of the campaign, and improve faster. This, in part, may be fairly attributed to the publications of the Commission, which to the number of more than one hundred and fifty thousand have been scattered through the country and largely reprinted in the newspapers.

As every regiment brought to a high sanitary condition is found to be a radiating centre of good influences, it has been thought that the labors of the inspectors (their numbers being necessarily far too small) would be most effectively and economically

applied, by making as thorough work as practicable in the inspection of each regiment visited, and in securing the efficient co-operation of its officers, rather than in a superficial examination and hurried efforts for the direct benefit of a larger number.

The complete and accurate inspection of a single regiment, with the collection and recording of information on all the points to be embraced in the Inspector's return, cannot, as a rule, be performed in less than an entire day. If there are improvements to be suggested, and their necessity explained to officers fully engrossed with their new military duties, much additional time must be spent, and many more visits often paid, before the necessary orders are given, and carried into execution. But it should be added, in justice to our volunteer officers, that the Inspectors of the Commission have seldom had occasion to complain of any want of prompt, cordial, and intelligent co-operation on their part.

The Commission has distributed gratuitously to the surgeons and officers of the volunteers, three thousand each, on an average, of five concise treatises on the best means of preserving health in camps, and on the treatment of the sick and wounded in camp and the battle field. As the surgeons of the volunteer army are almost altogether drawn from civil practice, and as no books, or even circulars of instruction in regard to their novel responsibilities, have yet been supplied them by Government, these modest works have been found of considerable value.

INQUIRY.

After the inspection of each camp or post, the inspector is required to make an elaborate report upon its condition. This report consists mainly of written answers in the most exact and concise form to a series of printed questions, one hundred and

eighty in number, covering every generally important point connected with the sanitary condition of the army.

More than four hundred of these reports have been received by the Commission. Their results are carefully tabulated, and suitable digests prepared by an accomplished actuary. The Commission is not without hope, if it should be enabled to continue its operations, eventually to lay before the country a body of military medical statistics more complete, searching, and trustworthy than any now in existence.

Information as to the condition of the army is obtained also from other sources. The Assistant Secretaries of the Commission, Doctor J. S. Newberry, Doctor J. Foster Jenkins, and Doctor J. H. Douglas, each having superintendence of a different geographical department, make, from time to time, reports in a more general form than those of the inspectors.

In certain cases, special agents are employed, and special investigations made. (See notes on Bull Run, in appendix.) Valuable reports have likewise been furnished by members of the medical staff; and members of the Commission have, themselves, undertaken investigations requiring special scientific knowledge.

CONDITION OF THE VOLUNTEER ARMY.

A brief statement of the condition, in certain respects, in which the army was found during the months of September and October, so far as this can be deduced from the reports of inspection made during those months, will best illustrate the character of the information obtained, and will serve to indicate the points to which it seems most desirable the attention of Government should be directed.

The number of regimental returns from which the statistics to be presented will have been derived is two hundred, and they will accurately indicate the condition of the army in the particulars specified, so far as the condition of the regiments in question,

taken at random, and some from each division of the army in the field, was at the time of inspection fairly representative of the condition of the whole. More general statements will be introduced where this is known not to be the case, or when, for other reasons, it appears to be necessary to fairly present the character of the information which has been collected by the Commission.

Of these returns, thirty-seven (37) were from regiments recruited in New England; one hundred and one (101) were from regiments recruited in the Middle States, including Virginia, Maryland, and Delaware; sixty-two (62) were from regiments recruited in the Western States, including Kentucky, Missouri, Kansas, and Nebraska.

Time of Recruiting.—The time occupied in recruiting each of these regiments averaged six (6) weeks, the shortest period being ten (10) days, the longest about three (3) months.

Nativity.—In seventy-six and a half ($76\frac{1}{2}$) per cent. of the regiments inspected, native Americans were found to constitute the majority.

In six and a half ($6\frac{1}{2}$) per cent. there was a majority of Germans; in five and a half ($5\frac{1}{2}$) of Irish; and in five and a half ($5\frac{1}{2}$) the number of native born and foreign born was about equal. Of one (1) per cent. the returns give no information on this point.

The relative proportion of foreigners and native born in the volunteer army cannot, at present, be stated with accuracy. It is certain, however, that it is not true, as has been stated, that the majority of the army is of foreign birth. It would probably be a near approximation to the truth to state that about two-thirds of our volunteer soldiers are American born, and nine

tenths citizens, educated under the laws of the Union, and in the English tongue.

Age.—From incomplete returns, the average age of the volunteers is judged to be a little below twenty-five (25) years. Somewhat more than one-half of their number are under twenty-three (23.) The average age of the officers is about thirty-four (34.)

The number of men of any age between eighteen and forty is not far from double the number of those five years older. For example, the number of those twenty years old is double the number of those at twenty-five.

It is important that the degree of liability to death from disease in war, at different ages, should be ascertained. Data are accumulating which will serve to determine this. It is still more important to determine the degree of liability to sickness at different ages, in army life, especially as this affects the question of the relative efficiency of men, as soldiers, at different ages. For this purpose, no sufficient records are at present made by the surgeons of the army, and it is not practicable for the Commission to supply the deficiency. An improvement in the medical record of the army in this particular is therefore desirable.

Inspection of Recruits.—In fifty-eight (58) per cent. of the regiments, there had been no pretence of a thorough inspection of recruits on enlistment.

In only nine (9) per cent. had there been a thorough re-inspection when or after they were mustered in.

The Commission took occasion soon after its organization to address the Governors of all loyal States on the need of more vigorous inspection of recruits. It is unfortunately certain, how

ever, that this important duty has continued to be generally neglected or superficially performed.

A careful examination of the causes officially assigned for the discharge of 1,620 men from the army of the Potomac, as unfit for service, during the month of October, made by a committee of the Inspectors of the Commission, experienced in observation of military hospitals, leads to the startling conclusion that fully fifty-three per cent. of the whole number were thus discharged on account of disabilities that existed at and before their enlistment, and which any intelligent surgeon ought to have discovered on their inspection as recruits. This conclusion is sustained by information from other sources.

These men had each, probably, cost the Government at least one hundred dollars for his pay, rations, clothing, transportation, medicines, &c., making an aggregate of over eighty thousand dollars, absolutely wasted on men who ought never to have been enlisted. Extending the calculation just suggested to the whole army, and for the whole period since the commencement of the campaign, it seems probable that a million of dollars has been lost by mere neglect of preliminary inspection. This pecuniary loss, however, is small compared with that caused by the diminution of efficiency which every corps suffers by the introduction of any considerable number of men unfit for service, constituting, as they do, more than anything else, the "*impedimenta*" of the army.

It is difficult to say how far the process of eliminating from the army men who should not have been permitted to join it can now be carried with safety, but it is manifestly desirable that the most decided cases of disability be ascertained by a faithful re-inspection, and discharged from service, and that medical and military considerations be more rigorously enforced in future enlistments. The regulation prescribing the age of eighteen as a minimum should be invariably insisted upon. Every rule,

indeed, as to medical inspection of recruits for the regular army, is equally applicable to recruits for the volunteer army, and should be enforced with equal strictness. Recruits properly rejected by the inspectors of the former have, in many cases, been allowed to enlist as volunteers, and have been invalided after a few weeks or months of service.

Another point connected with the volunteer recruiting service deserves more attention than it has received: the danger, namely, that follows the enlistment of men notoriously vicious and degraded. In the regular service, persons of this class are, from the very moment of enlistment, controlled in some degree by the habits of command that have been acquired by their officers, and by the systematic and exact discipline they are thus enabled to enforce. But, among newly-organized volunteers, this cannot be expected, until the whole command has been for some considerable time in service, and until the majority of the men have become soldiers in reality, as well as in name. While this educational process is going on, the mere presence in camp of half a dozen dissolute, insubordinate, and ruffianly men tends very much to retard the progress in discipline of the whole command. They set an example of unwholesome indulgence of every kind, thwart all measures for the sanitary improvement of the camp, are the first subjects of disease, and the first to turn their backs on the enemy. Whatever disloyalty and desertion have occurred among our soldiers, may generally be traced to persons of this class. It is to be hoped that all such will hereafter be rigorously excluded from the people's army.

It is also desirable that sanitary regulations at the various depôts for volunteer troops be strictly enforced; that every recruit be vaccinated immediately on enlistment; and that in-

creased attention be paid to the hygienic care of military companies in transitu by railroad and by transports.

Situation of Camps.—Camp sites have been generally selected for military reasons alone, and with little if any regard to sanitary considerations. The regimental surgeon has seldom been consulted on the subject. In many instances disease is directly traceable to this omission.

One fourth the regiments were found encamped on sites which had previously been occupied by others.

Except at Cairo and in the prairie region, camps have been generally formed on the tops and sides of hills. During the hot weather, nearly one-half were in the shade of woods—an objectionable circumstance.

Water.—Water of wholesome quality was found within convenient distance of the camp in all but two cases. The regiments encamped at Cairo were abundantly supplied with ice during the hot weather.

Occupation of Camp Sites.—The average occupation of a camp site, up to the date of inspection, had been twenty-one days. In the east this period has generally been largely exceeded, and regiments have frequently occupied the same ground much longer than is safe or advisable.

Drainage, natural.—Fortunately in those cases where the drainage by inclination was the most difficult, the soil and sub-soil has been porous and favorable to drainage by filtration. As the immediate inconvenience occasioned by a shower of rain in these flat sides led to the practice of better judgment in artificial drainage than has generally obtained on the hill sites, there has been less prejudice to health from poor drainage in the fixed

camps at the west than in those of the armies of the Potomac and Western Virginia, which have generally been upon clay soils or over retentive sub-soils. There has been, for instance, not half as much rheumatism at Cairo as in the eastern camps and those of Western Virginia.

Drainage, artificial.—Until recently, the artificial drainage of camps, when first visited by the Inspectors, has been found very imperfect—the men of each tent being left in most cases to form drains around it according to their own judgment. In consequence of their ignorance, unskilfulness, or indolence, the drains have often been useless, and not unfrequently have aggravated the evil they were designed to remedy. As soon, however, as good examples became frequent, the practice of a systematic arrangement began to be generally adopted. The majority of volunteer camps are now at least as well drained as those of the regulars. The average depth of the camp drains is about six inches. In about one-half the camps the drains were found more or less clogged, owing to their crookedness and imperfect construction, and to want of proper attention in keeping them clean.

The consequence of neglecting drainage are frequently apparent on inspection of the sick list, and more detailed regulations with regard to camp drainage are desirable. At present it seems to be nobody's business to lay out a system of drains. Without a complete system, drainage can seldom be effective.

Camp Arrangement.—In general, the plan for laying out a camp supplied in the *Army Regulations*, is approximately followed, but the tents are placed more closely together than the minimum there prescribed. The difficulty of drainage is thus increased, and the narrow spaces between the tents, difficult to be swept, become half-concealed receptacles for rubbish.

Tent Accommodation.—Six men are usually provided with lodging in one of the “wedge” tents. In the Sibley tent from twelve to sixteen; of late sometimes twenty.

Ventilation.—Tents are seldom tolerably ventilated at night. Of the regiments under consideration occupying the wedge tents, none were found in which the Inspectors were satisfied that proper attention was paid to ventilation, and it was obvious in some cases that the men suffered in health in consequence. The Sibley tent is more convenient of ventilation, and cannot as well be tightly closed as the wedge form. The Commission warned the Department, in August, of the evil likely to ensue from the difficulty of ventilating the wedge tents. It is now found that typhus is occurring more frequently in the regiments occupying these tents than in those that have the Sibley—the ratio being 29.5, to 23. The Massachusetts Seventh Volunteers, Colonel Davis, Surgeon Holman, is the only volunteer regiment reported, to the present date, in which a thorough ventilation of the wedge tent has been generally established. It was here induced by the occurrence of typhoid fever, and by this, prominently among other means employed for the same end, the most gratifying, and, at this season, unusual result of banishing this formidable disease has been obtained.

The Inspectors have advised the striking of each tent once a week, for the purpose of giving it a perfect cleansing and airing, and the practice is being of late quite generally adopted.

Tents.—Fifty eight (58) per cent. of the regiments had been provided with the wedge tent, ten (10) with the wall tent, seven (7) with the bell tent, nineteen with the Sibley, others not stated. Ninety per cent. of these were made of good canvass; the remainder were of twilled cotton or drilling, or so old as to be leaky.

Flooring.—Twenty-four (24) per cent. of the regiments were provided with tent flooring of boards, twenty (20) per cent. with india-rubber cloth, in twenty-one (21) per cent. straw or branches were used for this purpose, and in thirty-five (35) per cent. the men slept on the ground.

The following table shows the relative proportion of these several kinds of flooring in the three great divisions of the army.

The important influence it will be doubtless found to exert on the health of the men justifies especial inquiry into the subject.

	Army of the Potomac.	Western Virginia.	Mississippi Valley.
Board flooring - - - - -	25	20	23
India-rubber cloth - - - - -	25	7	10
Straw or fir branches - - - - -	19	23	23
None - - - - -	31	50	44
	100	100	100

The following table shows the ratio of sick men per thousand in regiments which had been supplied respectively with india-rubber blankets; wooden tent-floors; straw, fir boughs, or cedar boughs; and in those which have been sleeping on the bare ground. The data are taken from the returns of 120 regiments, and chiefly in November.

REGIMENTS SLEEPING ON—	ENTIRE NUMBER OF REGIMENTS.	THOSE IN WESTERN VIRGINIA EXCLUDED
	Average ratio for 1000.	Average ratio for 1000.
Wood -----	75.7	61.5
India rubber -----	60.9	60.9
Bare ground -----	91.3	69.3
Straw or fir boughs -----	77.5	45.8

As the forces in Western Virginia were, as a rule, unprovided with rubber blankets, and as they have suffered special hardships in other respects, they are excluded from the comparison in the second column.

As rubber blankets had not, at the time the data were collected, been issued by Government, it is probable that the regiments furnished with them had also been better provided for than usual in other respects, and that those sleeping on the bare ground were generally at a greater distance from the supply depots than the others, and consequently not as well provided for in other respects.

A limited examination of the diseases of the army indicates that the largest proportion of those of typhoid type occur with regiments sleeping on rubber blankets, the least with those on straw or boughs; the largest proportion of catarrhal, with regiments on wooden floors, the least with those on the ground; the largest of rheumatism, with those on wood, the smallest with those on straw or boughs; the largest of malarial, with those on the ground, the least with those on straw or boughs.

As had been presumed by the Commission, it has been proved that the best bed for soldiers in camp, can, with a little skill, be formed from fir or cedar spray, whenever it can be obtained in sufficient quantity. The Inspectors have from the outset been instructed to advise its use whenever practicable. It should be frequently removed and burned, after a thorough cleansing of the tent floor, the tents being struck for the purpose.

Experienced officers generally object to the board floors in tents. They are thought to be more damp than the ground itself and they offer an opportunity for the collection of rubbish and dirt, and make them difficult of removal.

Privies.—Privies had been established in all the camps inspected, except those of two or three regiments recently mustered in.

In eighty (80) per cent. of the camps, they are reported to be properly arranged and kept in proper order, no offensive odor drifting from them. In twenty (20) per cent., proper attention was not given to them, and the health of the men was more or less seriously endangered in consequence.

In sixty-eight (68) per cent. of the camps, the men seemed to be effectively restricted to the use of privies. In thirty-two (32) per cent., the proper prohibition was found by the inspectors not to be strictly enforced.

In thirty-five (35) per cent., the men were allowed, at least at night, to urinate within the camp limits. Night buckets, which are regularly provided, one for each tent, in the British service, are nowhere in use. The Commission does not think it desirable that they should be added to the camp furniture, believing that their cleaning would be too frequently neglected.

Disposition of Offal.—In seventy-seven (77) per cent. of the volunteer camps, slops, refuse, and offal are systematically removed to a distance from camp by a daily detail of men.

In twenty-three (23) per cent., this duty was performed irregularly, or very imperfectly. In nineteen of these twenty-three camps, the inspectors found odors of decay and putrefaction perceptible in and about the tents and streets.

Stables.—Stables are sometimes found actually within the camps, and quite frequently within half the distance prescribed by the *Regulations*.

In rather more than fifty (50) per cent. of the camps, the manure and litter of the horses are allowed to accumulate for an

indefinite period. In the rest, this source of danger is removed to a distance, or burnt, once a week, or oftener.

Camp Police, in general.—Of the camps inspected, five (5) per cent. were in admirable order, forty-five per cent. fairly clean, and well policed. The condition of twenty-six (26) per cent. was negligent and slovenly, and that of twenty-four (24) per cent. decidedly bad, filthy, and dangerous.

In those camps which are referred to as in a neglected and positively bad condition, some or all of the following sources of danger to the health of the men were found to exist, viz: drains wanting or clogged up, and retentive of stagnant water; the camp streets and spaces between the tents littered with refuse food and other rubbish, sometimes in an offensive state of decomposition; slops deposited in pits within the camp limits, or thrown out broadcast; heaps of manure and offal close to the camp, and the privies neglected.

In about two-thirds of the camps, the streets were found fairly clean, but in only about one-third were the edges of tents, the spaces between them, and the camp drains, entirely free from litter and rubbish.

On the whole, a very marked and gratifying improvement in the custom of the volunteer regiments in respect of camp police has occurred during the summer. Faults in this respect, which were at one time generally regarded as unworthy of the attention of regimental officers, are now considered disgraceful, and the number of camps in which officers and men take pride in maintaining an exact and severe camp police, is rapidly increasing.

Clothing.—The shirts used by the men were found to be of poor quality in twenty-six (26) per cent. of the regiments examined. In seventy-four (74) per cent., they were of the Reg-

ulation quality. In ninety-four (94) per cent., the men had been provided with two shirts each. In four and a-half ($4\frac{1}{2}$) per cent., they had but one each, and in the remainder only a part were properly supplied.

A want in this and other articles of clothing frequently arises from the fact that the men have sold or bartered away a part of what they have received.

In nothing are the volunteer officers more remiss of their duty than in that of ascertaining such deficiencies, and in making them good upon a charge against the pay of those who are responsible for them. A proper overstock of clothing is seldom kept in regiments for this purpose. Officers have often been known to degrade themselves, their Government, and their commands, by begging for supplies of clothing, as a charity, which their men were abundantly able to pay for, and which it was their duty to obtain for them, and make them pay for.

Eighty-two (82) per cent of the regiments were well supplied with overcoats, and seven (7) per cent. partly so. In eleven (11) per cent. there were none at the time of the inspection. In only three (3) per cent. of the regiments were the overcoats of poor quality. Seventy-five (75) per cent. of the regiments were provided with good cloth body coats; the remainder with flannel sack coats or cloth jackets.

Of two hundred regiments, all were provided with pantaloons—one hundred and seventy-five sufficiently, eight indifferently, seventeen very poorly.

Men have been frequently seen during the summer on duty and on parade in their drawers alone.

In seventy-five (75) per cent. of the regiments, one good blanket had been issued to each soldier. In twenty (20) per

cent., two had been provided; these being, however, in most cases, of inferior quality. In five (5) per cent. the men had never all received each a blanket.

Deficiencies in the regulation allowance of clothing, noted in October, have since been generally made good. Where they have not, it is in nearly every case owing to the ignorance, negligence, or knavery of regimental and company officers. There are ample supplies of all necessary articles of clothing, including gloves and socks, in the principal depôts, from which all wants still existing can be supplied at short notice upon the requisitions of the proper officers.

Never, probably, was so large an army as well supplied at a similar period of a great war.

Cleanliness.—In about eighty (80) per cent. of the regiments, the officers claimed that they gave systematic attention to the personal cleanliness of the men; but in very few instances—almost none—is this attention what it should be. The washing of the feet is very rarely enforced as a military duty, and in not more than six per cent. of the regiments did the inspectors believe, from personal observation, that the officers strictly enforced the *Army Regulations* in respect of washing the head and neck. In eighty per cent. of the regiments, the officers reported that the men washed their shirts at least weekly. In the remainder the want of a change was sometimes given as a reason for this neglect. In 90 per cent. the officers professed to comply with the *Army Regulations* in regard to the removal of dirt from their woolen clothing; but, from observation, it is obvious that this is very rarely done in a thorough manner.

The volunteer army is more unsoldierlike in respect to matters of this kind, and its improvement has been slower in them than in any other. That scrupulous nicety and exactness in the care

of articles of dress and equipment, which gives so much occupation to regular soldiers, and which is not only important to be observed for the sake of their health, but as presenting the surest evidence of a high condition of discipline and efficiency in all other respects, is, as yet, entirely unknown. A proper military inspection scarcely ever occurs in a volunteer regiment. Recently, the inspectors of the Commission have been required to return answers to the question: “*Are officers and soldiers on duty allowed to wear their coats partially buttoned, or to follow personal inclination in matters proper to be made uniform and regular?*” In nearly seventy-five (75) per cent., officers, when advised with on this point, confessed that very little attention was paid to such matters, and in most instances could not understand the object of the inquiry, thus showing that they had not a proper appreciation of the value of uniformity, of their own duties, or of the trouble that would be saved them in their duties by a strict enforcement of the intention of the *Regulations* in this respect.

A chief advantage of the uniform of military bodies is, the facility it affords for keeping their equipments in serviceable order. When every man is expected to appear, in all matters of dress, the exact counterpart of every other man, the attention of the officer is arrested by a very slight neglect of proper care of his equipment on the part of any individual. On the principle of the proverb, “A stitch in time saves nine,” it is easier and cheaper, for both officer and private, that no day passes without every stitch of clothing, every strap, buckle, and button being put in the best possible condition. In European armies, every man is required to be provided with, and constantly carry about him, not only articles necessary for the repair of his clothing, belts, &c., but conveniences for cleaning both his person and clothing; as, for instance, a switch or cat for whipping dust to the surface of cloth, and a brush to remove it; oil, emery, whiting, blacking and brushes, for straps, shoes, and buttons.

In the British army, every private is furnished with a tooth brush, which he is required to show in his knapsack at the Sunday morning inspection. The economy of this regulation may be inferred from the prevalence of toothache and swollen faces in our camps.

Among volunteers it is somewhat rarely that men are found provided with the few articles which are essential to an economical care of their clothing; still more unfrequently are they found possessed of those which are requisite to the maintenance of health in crowded camps and quarters. This want also stands directly in the way of the development of that esprit du corps, which is as essential to military efficiency as to health, and is the only reason which can be assigned for the greater difficulty which the inspectors have found in inducing a marked improvement in this direction, than in any other.

It seems desirable, therefore, that such articles should be made a part of the Government supplies, and that every man should be required to show that he has them properly stowed in his knapsack, at each Sunday morning inspection—new issues from the quartermaster being made to supply losses in the same manner as of clothing, the value of all beyond the yearly allowance being deducted from the monthly pay of those making this necessary.

Slovenliness is our most characteristic national vice. Frontier necessities and costly labor account in a measure for this. The indirect influence exerted upon all parts of the country by a peculiar local system of labor explains more. The city of Washington illustrates the vice and the penalty that is paid for it. Structures designed in themselves to be commensurate with and typical of the moral grandeur of a great republic, are offences against good taste, like precious stones on dirty hands, when seen from out of the unmitigated shabbiness and filth of the unsewered, unpaved, unpoliced streets of a collocation of the

houses of citizens who cannot remedy the evil. "The National Hotel sickness" was a beneficent reproof of the narrow policy which demands it of them. That which was lost by it, could have been cheaply saved, at an expense ten times as great as would be the necessary cost of making Washington a healthful, beautiful, and appropriate rural metropolis; an attraction, an example, and an unceasing influence for good, in this way, to the whole nation. Yet we compel our most valued public servants to reside in this capital, and with abundant evidence that similar causes are liable to induce, any day, a far more deadly and sweeping pestilence, do nothing to remove them.

While the simplest, though most absolute, sanitary laws are thus disregarded in high places, it need not be thought strange that the Inspectors find it peculiarly difficult, even after typhus has entered the camps, to make the volunteer officers realize the actual military necessity upon which the army regulations, with reference to the personal cleanliness of the men, are based.

If five hundred thousand of our young men could be made to acquire something of the characteristic habits of soldiers in respect to the care of their habitations, their persons, and their clothing, by the training of this war, the good which they would afterwards do as unconscious missionaries of a healthful reform throughout the country, would be by no means valueless to the nation.

But whatever measures can be taken which will tend materially to improve the habits of the volunteers in this respect, will undoubtedly be amply repaid in their greater health and better spirit in their duty.

The recommendation made to the Department, in August, that each soldier should be provided with a clothes brush, shoe brush, tooth brush, comb, and towel, adapted to be carried snugly in

the knapsack, and for which he should be required to account weekly, is therefore respectfully renewed.

Food.—The regulation articles of food are universally acknowledged to be had in great abundance, and their quality is, in nearly all respects, generally satisfactory to the men.

The chief complaint is want of fresh vegetables, and this is mainly confined to regiments in which, through the neglect of the officers, company funds are wanting.

Dessicated vegetables are used to some extent, but are not popular, because the men have not learned how to cook them. Regulars have been found to prefer them to fresh vegetables.

At the commencement of the campaign, captains of companies generally neglected to make requisitions for rations in proper form, and it was often said that they could never be made to do so. As such requisitions are the only honest foundation of the army system of supply, the Inspectors were directed to give particular instructions on this subject, and to urge strenuously their adoption. The result has been satisfactory. Requisitions are now almost universally made in proper form, the exceptions being in the case of new regiments, and in these only for a short time after they are mustered into service.

Company Funds.—The Commission, soon after its organization, recommended to the proper department of Government, as an important sanitary measure, the issuing of an order by which the commutation of rations, or sale to Government of surplus food, otherwise wasted, would be facilitated, and volunteers thus encouraged to vary their diet by the substitution of articles not supplied in the ration. Such an order was at length issued, and, though the volunteers are very slow to comprehend it, or believe

in the advantages which it offers, a very satisfactory advance in this respect is recently reported.

In forty per cent. of the regiments inspected during the month of November a company fund existed in every company; they had been formed also in several companies of many other regiments. In one hundred and thirty-six out of two hundred inspected prior to November 1st, not a single company fund had been commenced.

The company fund is the soldier's only resource for many articles indispensable to his health, comfort, and efficiency, *e. g.*, fresh vegetables, butter, milk, pepper, (no condiment but salt being supplied by Government;) many utensils required for cooking and saving rations; knives, forks, spoons, brushes, blacking, &c. Cavalry and artillery men depend on it for many other articles required for their efficiency and creditable appearance. Its formation, therefore, promotes the health of a regiment not only directly, but also by improving the morale, soldierly feeling, and self respect of the men, which have no small influence on their physical condition.

It may be added that the existence of a company fund operates as a check on frauds on the Commissary and Quartermaster's Departments, and tends to diminish the danger of disease to which sutler's shops expose the men.

In one case fifty-seven (57) dollars have been saved in a month, the men, according to their own testimony, having fared well. The saving ought to amount to at least six thousand dollars per annum for a regiment of one thousand men, and this amount is wasted whenever company funds do not exist.*

The Inspectors of the Commission have all done much to re-

* Company savings of one hundred dollars a month have been more recently reported.

move objections, and induce the attempt to form the fund in every company they have visited; and in the army of the Potomac, one of them has for sometime been almost exclusively employed in demonstrating its practicability and advantages.

Hospital Fund.—Analogous to the company fund, and of like importance, is the hospital fund, raised in similar manner, by the re-sale to Government of the rations not needed by men while in hospital; or, in other words, by the commutation of these rations for their money value. On this fund the volunteers have to rely for hospital bedding and clothing, and for all the extra delicacies, and medical and other appliances which the sick and convalescent require. Yet it exists in the regimental hospitals of not more than one-third of the volunteer regiments now in the field.

Cooking.—The volunteers do not, as a general rule, take kindly to cooking, but of late no serious complaint on this score has been reported. The system of rotation of cooks that prevails in the regular army is not generally adopted, and the manner of selecting cooks is very varied.

Army cooking is generally done by fires made in trenches, in the most simple and primitive manner. Not more than ten per cent. of the regiments inspected use cooking stoves of any pattern. Several which employed them for a time have given them up and adopted trenches and an open fire, as practically more efficient and convenient under the circumstances.

The cooking of the volunteers constantly improves, and, however rude, is probably already more wholesome than that which the average of the men have been subject to before enlistment, because some of the most deleterious modes of cooking to which

they have been accustomed are not practicable in camps. It must be added, however, that peddlers of "pies" and other ill-prepared and injurious articles are generally admitted into camp with little, if any, restriction, and are subject to no efficient supervision. Fluctuations on the sick list have been, in certain cases, found to be directly corresponding with the greater or less facility of access to the men given the pie-peddlers.

A regular and thorough inspection of the contents of all peddlers' wagons coming to the camp has been instituted by order of the Colonel, at the suggestion of an inspector of the Commission, in several regiments, with manifest advantage. If an inspection of markets is a necessary civic office, an inspection of peddlers is certainly a necessary office for our camps. There would seem to be occasion for a general order or regulation on this subject.

Sutlers.—In this connexion reference cannot be avoided to the evil which often comes to the men from the sutler's shop. There would be little objection to the present sutler system were the instructions of the *Army Regulations* thoroughly carried out. But it is unquestionably true that proper control and supervision of the sutler is scarcely ever maintained in volunteer regiments.

There is reason to believe that corrupt bargains have been formed in certain instances between the sutler and officers of his regiment; that in other cases officers receive presents of wine from the sutler; that sutlers have used their influence and power over the men to prevent them saving from their pay for the sake of their families, and that they sometimes engage in the secret sale of spirits.

Of two hundred regiments inspected in September and Octo-

ber, twelve (12) were without sutlers. Of the one hundred and eighty-eight (188) sutlers, one hundred and three (103) were appointed by the colonel of the regiments, sixty-three (63) by the Secretary of War, fourteen (14) by a board of regimental officers, five (5) by Governors of States, and the appointment of three (3) was not ascertained.

In one hundred and four (104) regiments a tariff of prices for the sutler's shop was said to have been established, although it was very rarely "conspicuously posted," as required by the *Regulations*. It had been fixed in some instances by a regimental board or council, and in others by the sutler himself. In eighty (80) regiments, the price of articles sold was not fixed, and in four (4) the fact was not reported.*

Drunkenness.—In thirty-one (31) regiments, the sutler was allowed to sell liquor. In one hundred and sixty-nine (169), the officers reported that the sale was prohibited. In one hundred and seventy-seven (177), it appeared that the men did, in fact, get liquor with more or less freedom and facility from the sutlers

* The following is an extract from the communication of a surgeon of a volunteer regiment, addressed to the Commission:

"In our regiment we have the best sutlers on the Potomac; *nevertheless they prove, in actual practice, an unmitigated curse.* Some of the men throw their rations away, and literally live on sutler's trash. Others will eat a full ration, and then go straight to the sutlers and eat three or four villainous pies. Many of these have been fried in condemned lard a week before the soldier eats them. The result is camp *diarrhœa, dysentery,* and all their concomitant evils.

"Sutlers are a twofold evil. By them the soldier is tempted to spend his earnings, which should be saved for a purpose, and is made sick in the same transaction. My observation and experience in camp prove clearly that to keep a soldier *healthy* you must confine him to plain and regular rations.

"If Congress would pass a *law,* the tendency of which would be to *compel* the soldiers to live on the Government rations only, it would prove a blessing of infinite value to the service."

or otherwise. In twenty-three (23), the inspectors were satisfied that the men did not often or readily obtain liquor.

It must not be understood, however, that in all the regiments which had access to liquor there was any serious habitual excess in its use. Intoxication was acknowledged to be common in only six (6) regiments. In thirty-one (31), it was said to occasionally occur, though not deemed a serious evil; and in one hundred and sixty-three (163), the inspectors were assured, and had no reason to doubt, that it was very rare. In the majority of regiments there is very little dram-drinking, except shortly after pay-day. The volunteers are believed to be more temperate than any European army. Most of the liquor drunk by the volunteers is probably obtained from the pie peddlers. When other means fail, it is conveyed in the pies.

In certain regiments containing a large per centage of Germans, lager beer has been freely used. There is evidence before the Commission tending to show that its use (at least during the summer) was beneficial, and that disorders of the bowels were less frequent in companies regularly supplied with it in moderation than in other companies of the same regiment.

Discipline.—The daily average of men in the guardhouse was reported to have been—

In 4 regiments	-	-	7
8 do.	-	-	6
17 do.	-	-	5
15 do.	-	-	4
39 do.	-	-	3
41 do.	-	-	2
57 do.	-	-	1
4 do.	less than one.		
15 do.	not stated.		

The average is $2\frac{6}{10}$ men to each regiment.

Men are generally kept effectually within camp limits. The average daily absences from camp were eight for each regiment.

The Inspectors of the Commission have been instructed to give attention to certain matters solely as tests of discipline.

The reason for this is explained in the following Resolutions adopted by the Commission in July :

“ *Resolved*, That the Sanitary Commission, in their endeavors to promote temperance, cleanliness, and comfort among the troops, have become convinced that the first sanitary law in camp and among soldiers is *military* discipline; and that unless this is vigorously asserted and enforced, it is useless to attempt and impossible to effect, by any secondary means, the great end they propose—which is the health and happiness of the army.

“ *Resolved*, That looking only to the health and comfort of the troops, it is our profound conviction that any special relaxation of military discipline in favor of volunteer troops, based either upon their supposed unwillingness or inability to endure it, or upon the alleged expectation of the public, is a fallacious policy, and fraught with peril to the lives of the men and the success of the national cause; and that, speaking in the name of the families and the communities from which the volunteers come, and in the name of humanity and religion, we implore that the most thorough system of military discipline be carried out with the officers and men of the volunteer force, as the first and essential condition of their health, comfort, and morality.

“ *Resolved*, That the health and comfort, and efficiency of the men, is mainly dependent on the uninterrupted presence, the personal watchfulness, and the rigid authority of the regimental and company officers; and that all the great defects, whether in the commissariat or in the police of camps, are radically due to the absence of officers from their posts, and to the laxity of the discipline to which they are themselves accustomed—a laxity which would never be tolerated among regulars, and which, while tolerated among our soldiers, will make our force a crowd of armed men rather than an army.

“ *Resolved*, That it is the public conviction of this Commission, that the soldiers themselves, *in their painful experience of the want of leaders and protectors*, would heartily welcome a rigid discipline exerted over their officers and themselves; that the public would hail with joy the inauguration of a decisive, prompt, and rigid rule, extending alike to officers and men; and that any despondency or doubt connected with our military and

national prospects, or with the health and security of our troops, would disappear with the first indications of rigid order enforced with impartial authority throughout the whole army."

The opinion is often expressed by professional soldiers that an effectively disciplined army can never be made of volunteers, and that as undisciplined men can only be used in war in limited numbers, chiefly to preserve the fighting force from excessive fatigue, it is a waste of the public resources to keep a large volunteer force in the field. Many volunteers express, in effect, their acquiescence in this view, when they say, "You cannot expect volunteers to be as particular as regulars"—an answer constantly given to the suggestions of the Inspectors, when they find a regiment the condition of which is in all respects disgraceful to its officers. To the consideration that this war is to be waged against volunteers, the reply of those who believe that only a large army of regulars can prosecute it to a successful end, is, that undisciplined forces are much better adapted for defensive than for offensive operations, and that volunteers can never be pushed to the heart of the rebellion, however they may hack at its extremities. This view is habitually sustained by those whose position entitles their judgment to be regarded with respect, and the question whether volunteers can be effectively disciplined thus becomes a serious one for the nation, and may be thought to give an importance to the information obtained by the Commission, aside from its sanitary bearing.

Discipline is a habit of prompt and exact obedience under certain authority. Being a habit, it cannot be taken on, except by a more or less rapid process of acquirement. So long as progress is being made, a satisfactory state of discipline is not only to be thought yet possible of attainment, but it may be probable.

There have been a few regiments of volunteers in which no progress in discipline during a considerable period could be ob-

served. Special causes were obvious in every such case, and they were notoriously exceptional in character. There is no room for doubt that in a large majority of the volunteer regiments there has been from month to month a perceptible advance in discipline.

This is true not only of those regiments which have been commanded by officers educated at West Point, but of those the commanders of which six months ago had never had a sword or musket in their hands, never read a military book, never saw a company of soldiers. It is true not only of regiments of volunteers the officers of which were selected by the War Department or by Governors, but of those which elected their officers. It cannot even be said that a very marked difference in the progress of these different classes is to be observed. The advantage of educated and appointed officers over elected civilians is clearly manifest only in the fact that the former have in no case—as far as known to the Commission—allowed their regiments to fall into the rare, exceptional, excessively demoralized condition before referred to. Regiments of volunteers having an unusual strength of West Point officers have in all cases been found in a fair state of discipline, so that if an order with reference to matters of camp-police was given at the suggestion of an Inspector of the Commission, it could be assumed that it would not be neglected. But this has been equally true of many regiments whose officers were taken from civil life and elected.

It cannot of course be concluded that military education and experience is of no value, nor that there are no disadvantages attending the election of officers. But it may be fairly concluded that a special military education is not at all necessary to adequate appreciation of the value of discipline or to the enforcement of discipline. There is, indeed, room for doubt if the conviction which prevails with regular officers of the difficulty of enforcing discipline with volunteers, and their consequent hesitation and

endeavors to accommodate their habits to the supposed necessity for moderation in the exercise of authority in dealing with volunteers, is not a greater hindrance to their progress in discipline than the inexperience of the officers chosen from among civilians.

The disadvantage of the latter is certainly less, and the progress of their commands in discipline greater, compared with that of regulars and with volunteers commanded by regulars, than the Commission, influenced by the judgment of experienced military advisers, had been led to expect. In not a few cases where the officers of a regiment appeared at the outset peculiarly incompetent, quite careless of discipline and incapable of establishing it, after a few months a very decided improvement has been observed.

To account for this, it is only necessary to reflect that the habit of command grows, as well as the habit of obedience, and that if an officer does not habitually perform his proper duties, and see that the orders which, in the performance of his duties, it is necessary he should give, are carried out, discomfort is sure to result both to himself and to his command. Such officers, however popular they may have been when elected, soon become aware that the accidents, privations, and discomforts to which their men, through their neglect, are subject, are bringing ridicule, contempt, and hatred upon themselves, and they are thus driven to resign, or they fall into practices which cannot be overlooked by higher authority, and which lead to their dismissal, or they yield more and more to the habit of military authority, and will gradually learn that the simplest and easiest, and most popular course, is that of the most complete discipline.

Thus, throughout the volunteer army, the Commission has of late been gratified to find the habit slowly forming and strengthening, the general absence of which in July seemed to involve the greatest danger to health.

Commiseration for what are erroneously considered technical

offenders, and moderation or neglect in dealing with them, is costing the country more lives by far than the bullets of the enemy, and is adding many millions to the expense of the war. A strict enforcement of the *Army Regulations* would do more to prevent disease than all that the Commission can recommend to be done by other means. Neglect in their enforcement will be due less, hereafter, the Commission is convinced, to the ignorance and inefficiency of regimental and company officers, than to the inadequacy of the general staffs for their proper inspection, instruction, and superintendence. And it may here be proper to observe, that causes of disease and death can often be traced with great confidence to the occupation of military officers of high rank in merely clerical duties, and to delays and neglects which arise from the want of sufficient aids and clerks in administrative offices and headquarters. There is no office of Government, civil or military, with which the Commission has had frequent communication, which is not charged with such a weight of duties that it is impossible they can be got through with, except at an expense of labor to certain individuals, which cannot be long sustained without crippling the faculties which the good of the country needs to have constantly exercised in them.

Recreations.—About one-fifth ($\frac{1}{5}$) of the regiments possessed libraries, mostly of religious books. They were generally donations made to the chaplain.*

* There is a large religious element in the volunteer force. Religious organizations already exist in about half the regiments, and are rapidly increasing in number. The American Tract Society of Boston alone has distributed among them more than 20,000,000 pages, (equal to 60,000 12mo. volumes.) The number of letters written by the volunteers is remarkable, and a delightful indication of a fact which should remove all fear of a permanent military despotism in this country. In some regiments, of 1,000 men, it has averaged, for weeks, above six hundred a day. For all the regiments it must have been, through the summer, not far from three hundred. In some regiments, as Wilson's 22d Massachusetts, there is not a man unable to thus communicate with his friends at home.

There is an intense demand for books and periodicals, generally of the lighter class, and for newspapers. Reading matter of almost every class is gratefully received. The Inspectors are able to supply this demand in some small degree from the stores consigned to the Commission, but hospital patients are considered to have the first claim upon them. In one case, sixty dollars had been subscribed by a company from its ration savings for newspapers, a tent having been also got, which was used as a reading room.

In forty-two (42) regiments, systematic athletic recreations (foot ball, base ball, &c.) were general. In one hundred and fifty-six (156) there were none. As to two (2) the fact is not reported. Where there are none, card-playing and other in-door games generally take their place. There is some evidence of serious mischief from gambling. Sharpers are believed to have enlisted for the purpose of making money as professional gamblers. One (a non-commissioned officer) is reported to have boasted of large gains. But however this may be, the practice prevents the men from maintaining both mind and body in health by active amusement in the open air.*

Officers have not yet learned that it is a part of their duty to influence their men to this end. The observation was made by Baron Larrey: "After the accustomed military exercises, it is desirable that the men be subjected to regular hours, gymnastic amusements, and some mode of useful instruction. It is in this manner especially that mutual instruction established among the troops of the line is beneficial to the soldier and the state. Warlike music during their repasts or at their hours

* In the Second New York Artillery, Major H. P. Roach commanding, the men are receiving a regular and thorough gymnastic training. In many respects this regiment is in a more satisfactory sanitary condition than any other inspected to the date of this report.

“ of recreation will contribute much to elevate the spirits of the soldier.”—*Surgic al Essays*, p. 178.

Regimental Bands.—Of two hundred (200) regiments, one hundred and forty-three (143) were provided with bands, fifty-three (53) had none, and as to four, (4,) the fact is not reported. These bands are not generally of the first order, by any means, but are sufficiently good to please and interest the great majority of the soldiers. The men are almost universally proud of their band, particularly so if it be of more than average respectability, and like to compare it with others which they think inferior. It is, in many instances, supported in considerable part by a self-imposed tax on the pay of both officers and men, which sometimes is as high as five per cent. The Inspectors of the Commission report that this contribution is cheerfully paid.

They also frequently report that they have been much struck by the value attached by the men to military music on a scale larger than that of the bugle, fife, and drum; and that they are satisfied of the wholesome and stimulating influence of even a third-rate band; that it raises the spirits of the men, warms their patriotism and their professional feeling as soldiers, and thus actually tends (not so remotely as might at first appear) to promote health, discipline, and efficiency. This is particularly important in view of the small extent to which healthful recreations have been introduced into camp.

Dr. J. H. Douglas, who was despatched to Poolesville as special Inspector immediately after the battle of Ball's Bluff, reported to the Commission on this subject as follows:

“ I am convinced that music in a camp after a battle, whether it is a successful or unsuccessful engagement, is of great importance, but especially so after a defeat. One of the soldiers said to me, ‘ I can fight with ten times more spirit, hearing the band play some of our national airs, than I can without the

“music.’ Others of the wounded said they wished the bands “would play more frequently.”

Similar remarks have been often reported.

It is hoped that every encouragement may be given to the formation and improvement of regimental bands, so far at least as a proper economy will permit.

Remittances of Pay.—The soldiers of fifty-seven (57) per cent. of the regiments had sent home to their families a considerable portion of their pay. Of the remainder, many had not been paid at the date of inspection.

The men are generally disposed to send home from half to three-fourths of their pay, if satisfied that they can do so safely.

It is respectfully submitted that the remittance of pay by the soldiers to those dependent on them should be encouraged and facilitated in every possible way.

The practice improves the moral tone of the soldier, by keeping up his sense of a continuing relation with his family. It tends to preserve him from the vices of the camps, and from becoming a mere mercenary man-at-arms, and it thus makes him a better citizen when he returns to civil life. Being most abundantly fed and clothed by Government, he scarcely needs money, except occasionally to replace some lost or worn-out articles of clothing. He can, in fact, in most cases, scarcely spend it otherwise, without positive injury to himself. What is not sent home, is nearly certain to be laid out in unwholesome food (pies and the like) or more unwholesome drink, to the damage of his health and the diminution of his efficiency, to the cost of Government. As a general rule, the regimental pay day is immediately followed by an enlarged sick list, and a more populous guard-house.

It is confidently believed, that if fifty per cent. of that portion of the soldiers' pay which he spends in camp were thrown into

the Potomac, he would, on the whole, be the gainer, the only loser being the sutler and the peddler.

Moreover, the neglect to remit the soldier's pay often leaves his family dependent on public or private charity. There is danger of a great pauper class being thus created, especially in our large cities; and the existence of this class, always most undesirable, will be peculiarly mischievous at the present critical period by increasing local taxation and general distress, weakening the national resources, and wearying the people of the present just and necessary war.

The disposition among our soldiers to remit the largest part of their pay should, therefore, be gladly encouraged and aided in every way by Government, nor should there be any hesitation in incurring any reasonable expenditure which will confirm and strengthen so gratifying a characteristic.

Qualifications of Surgeons.--The qualifications of Regimental Surgeons, in respect of education and experience, cannot, as a general rule, be ascertained by direct inquiry. The Inspectors, however, are usually able to form a decided opinion on this point, by conversation, and by observing the mode in which the surgeon's duties are performed.

They report the Surgeons of one hundred and seventy-six (176) out of two hundred (200) regiments in question, sufficiently well qualified; four (4) incompetent; thirteen (13) of doubtful competence; and as to seven (7) regiments, the point is not reported upon, owing to the absence of the surgeon from his post, or to some other reason.

One hundred and twenty-nine (129) of these Regimental Surgeons are reported as not only competent, but as having discharged their duties with creditable energy and earnestness; twenty-five (25) to have done so with tolerable attentiveness; nineteen (19) to have been negligent and inert; of the surgeons of twenty-seven (27) regiments, no distinct opinion is expressed.

Camp Hospitals.—The arrangement, equipment, and supplies of the Regimental Hospitals are reported to have been in one hundred and five (105) of the regiments, good; fifty-two (52) indifferent or tolerable; twenty-six (26) bad.

In thirteen (13) regiments, no hospital whatever had been organized. As to four, there is no report.

The following table shows the aggregate strength of the two hundred regiments under consideration; the numbers sick in hospitals and in quarters; the proportion sick in hospitals and quarters to every 1000 strength, and to every 1000 cases on the sick list:

Of 200 regiments last visited previous to November, 1861.	Aggregate numbers.	PRESENT STRENGTH ON SICK LIST.	
		Proportion to every 1,000.	Proportion to every 1,000.
Strength when mustered.....	176,639		
Strength when inspected.....	176,042		
On sick-list at the time of inspection...	12,841	73	1,000
Sick in General Hospital.....	2,756	16	215
“ Regimental Hospital.....	2,973	17	231
“ Quarters.....	7,112	40	554

Resumé.—The table on the following page presents a resumé of the statements which have been given as to the condition of two hundred regiments. The returns of all inspections are reduced to a similar, exact, and concise form, and the precise condition of each regiment, of each brigade, of each division, of each department, and of the volunteers from each State, in all the particulars indicated, is separately tabulated at the office of the Commission. The causes of special disease may thus, sometimes, be demonstrated in a moment.

Table showing the Character of the 200 Regiments last inspected by the United States Sanitary Commission previous to 1st November, 1861.

No. of query in printed forms of Inspection Returns.	SUBJECTS OF INQUIRY.												Perfect.	Yes	No	Not stated.	Doubtful.										
	Extremely bad.	Very bad.	Bad.	Moderately bad.	Indifferent.	Moderately good.	Good.	Very good.	Extremely good.	10	9	8						7	6	5	4	3	2	1			
16 to 26 (inclus)	1	2	3	4	5	6	7	8	9	10																	
27 to 36 "		6	37	12	38	37	68	1																		1	
37 to 40 "		3	20	25	38	56	25	26	2																	5	
41		1	106	27	21	8	16	11																		10	
49		7	36	53	65	29	7	3																			
50 to 57 "		1	2	9	11	37	83	104	2																	2*	
76 to 79 "		1	8	14	24	53	47	42	8	2																1	
80 to 96 "																											1
98 to 109 "																											1
111 to 113 "																											3
117 to 123 "																											3
124 to 133 "																											1
134 to 154 "		1	1	8	16	52	58	41	6																	4	

* In civilian's dress—not in military uniform.

NOTE.—This table may be read thus: Of the 200 camps last inspected previous to the 1st November, 1861, the character of the Camp Sites as to elevation, inclination, shade, shelter from wind, malaria, &c., was found to be in six (6) cases "very bad," in thirty-seven (37) "bad," in thirty-eight (38) "indifferent," in thirty-seven (37) "moderately good," in sixty-eight (68) "good," and in one (1) case "very good." Concerning one of the 200 regiments, no statement was made.

MORTALITY, DISEASES, AND CASUALTIES.

Extent and General Character of Disease.—In the army of the Potomac, the average constant number of sick, per one thousand (1,000) men, has been sixty-three (63;) in the department of Western Virginia, one hundred and sixty-two (162;) in the Valley of the Mississippi, one hundred and sixteen (116.)

The average constant number of sick during the months of August, September, and October, in the regiments east and west, so far as visited, has been seventy-seven (77) per thousand. In this number all relieved from duty, from any sort of physical indisposition, however slight, are included.

At this rate, in order to secure a constantly active force of three hundred thousand men, (300,000) the nation must maintain in the field an army of about three hundred and twenty-five thousand, (325,000.)

The number of sick varies in different regiments from one-third of one (.33) per cent. to forty-nine (49) per cent.

The average length of time lost for active duty, in each case of sickness reported, has been a little more than five days, (5.18.)

The health of the volunteers of the army of the Potomac has been slightly better than that indicated by the returns respecting the health of the regular army, during the past year. The average health of the whole volunteer force in the field has been inferior to that of the regulars.

The average number of men constantly sick in the regiments from several of the States respectively, is nearly as follows :

New York,	(per thousand strong,)	-	-	-	-	55
Pennsylvania,	“	“	-	-	-	57
Massachusetts,	“	“	-	-	-	52
Connecticut,	“	“	-	-	-	49
Vermont,	“	“	-	-	-	88
Maine,	“	“	-	-	-	124
New Jersey,	“	“	-	-	-	36
Wisconsin,	“	“	-	-	-	76
Indiana,	“	“	-	-	-	42
Michigan,	“	“	-	-	-	76
Illinois,	“	“	-	-	-	156
Ohio,	“	“	-	-	-	192

Data derived from regiments of States not included in the above list are too limited to be of use. The forces from Ohio and some other States have been, to a considerable extent, subject to unusual privations and exposure, during the campaign among the mountains of Western Virginia. A similar remark applies to those of Illinois, in Missouri. There is reason to think that the most sickness has occurred where regiments, raised in far northern and highland districts, have been removed to lowland, fluvial, and seaboard districts; those, for instance, from Maine and Vermont, the ridge counties of New York, and from Minnesota, being more subject to distinct disease, as well as to demoralization, or ill-defined nostalgia, than others in the army of the Potomac. The healthiest regiments, physically and morally, have been those from the seaboard, as of New Hampshire, Massachusetts, Rhode Island, Connecticut and New Jersey; those from Rhode Island being probably the most fortunate in this respect, which fact, however, is chiefly due to their superior discipline early in the campaign.

It is difficult to compare the rate of sickness of foreign armies with that of the volunteers, because it is uncertain what degree of sickness in them places a man upon the sick list. Our volun-

teer surgeons are, undoubtedly, very accommodating in this respect, probably more so than the surgeons of the regular army or of foreign armies. It has happened in more than one instance that upon an order to advance against the enemy being given, every man of a regiment then on the sick list immediately reported himself well, was discharged, and shouldered his musket in the line of battle. It is probable that at least one-half those returned as sick by the surgeons of volunteers would do the same, under similar circumstances; that proportion being excused from duty on account of a cold in the head, severe fatigue, or a slight indigestion.

In the whole British army, in time of peace, 6.5 per cent. of the force otherwise available, is reported constantly "in hospital." Of the British army in the Peninsula under the Duke of Wellington, 1808-1814, 21 per cent. (or 9,300 of an average force of 44,500 men) was constantly "sick in hospital." The number of sick ranged from 9 to 33 per cent. of the whole force at different periods.

These rates were exceeded in the British army of the Crimea. To maintain 100 effective soldiers in the field, it there became necessary to provide for 26.6 sick men. The annual rate of mortality was 3 per cent. by wounds, and 20 per cent. by disease.

The annual rate of mortality in the British army, at home and in time of peace, was from 1.1 to 2 per cent. in the ten years preceding 1847.

The average mortality of the army of the Potomac has been, during the summer, at the rate of $3\frac{1}{2}$ per cent., (allowance being made for those who die after their discharge, from causes connected with army life.) Imperfect data received from the West indicate a considerably larger rate for the whole army; probably it will not be far from 5 per cent. if sweeping epidemics should be escaped.

Mortality from *disease*, in the Royal Navy of Great Britain, is 140 per cent. greater in time of war than of peace ; rising from an annual rate of 15 or 16 to one of 37 or 38 per 1,000 strength. The principal increase of the deaths in the navy, in time of war, is from disease ; the amount of increase from casualties being commonly quite inconsiderable.

The following statement exhibits a classification of the cases of disease in the volunteer army during a portion of the campaign, showing, also, the per centage of casualties of all kinds (wounds, accidents, &c.) for the same period, compared with like returns from the army of the Crimea, from April 10, 1854, to June 30, 1856 :

	Army of the Potomac.	Army of the West.	Army of the Crimea, Ap. 10, '54, to June 30, 1856.
Zymotic disease, (per cent.)	- 61.1	76.4	69.8
Constitutional, "	- 1.2	.6	.5
Local, "	- 30.7	17.3	15.6
Developmental, "	- 3.4	3.5	.1
Violence, "	- 3.6	2.2	14.0
	<hr/>	<hr/>	<hr/>
All cases	- 100.0	100.0	100.0

Two most important facts appear on the face of this table : first, the immense disproportion between cases of disease and of violence, fully justifying all that has been asserted as to the loss an army in the field must expect to sustain from these causes respectively ; and, secondly, the great excess of zymotic diseases, nearly all of which are, in a greater or less degree, preventible by proper precautions. For instance, typhus can be almost certainly averted by systematic attention to cleanliness and ventilation, small-pox by vaccination, and malarious diseases (intermittent fever, &c.) by quinine. It seems apparent, therefore, that it is within the power of Government, either by the action of the War De-

partment or by legislation, to enforce rules that will most materially diminish the waste of efficiency by disease, and the consequent cost of the present war.

Quinine as a Prophylactic.—In connection with the subject of malarial disease, above alluded to, attention is respectfully called to the evidence collected in a report prepared for the Commission, on the value of quinine as a prophylactic against disorders of that class.

In conformity with the views therein expressed, the Commission has, at a cost of five hundred dollars, since September last, in various urgent cases, issued to regimental surgeons, at their request, two hundred and twenty gallons of the solution of sulphate of quinine in spirits (“quinine bitters”) for the use of their men, under their own supervision. This has been done in the case of regiments which, from the peculiarly exposed situation of their camps, or from an inspection of their sick list, seemed in peculiar danger from disease of a malarious type. A reduction of the sick list, and a marked improvement in the health and efficiency of the men, has followed in every instance. The results of this trial induced the Medical Director of the army of the Potomac to request from the Surgeon General authority to supply quinine for use as a preventive, and not merely as a remedy; and this request has been so far complied with as to authorize its use for that purpose in certain specified regiments alone.

The following extract from a report made by Surgeon C. A. Chamberlain, of the 10th Massachusetts Volunteers, shows the effect of the use of quinine in that regiment as a preventive of disease.

After stating that malarious disease prevailed extensively among his men, Dr. Chamberlain proceeds to say :

“Believing that, by the administration of quinine to the men

“ as a prophylactic, we could diminish the amount of the disease
 “ in the regiment, I applied to the Board of Sanitary Commis-
 “ sioners, and was kindly furnished with twenty-three gallons of
 “ whiskey, containing in each ounce two grains of quinine. Our
 “ morning reports at the time show an average of fifty men
 “ unfit for duty, besides those in hospital, of which there were
 “ usually twenty. The medicine was given to all who were de-
 “ bilitated, or who showed any symptoms of approaching disease,
 “ in doses of one to two ounces, once or twice a day. * * * * *

“ Most of them grew stronger and better able to discharge their
 “ duties, their appetites were increased, they seemed less sus-
 “ ceptible to colds and coughs, and those who would doubtless
 “ have suffered an attack of malarial fever, were saved from it.
 “ The testimony of the morning reports of the sick is equally
 “ emphatic, *bringing their number down gradually from fifty or*
 “ *sixty daily to twenty-five.* Had we been supplied with a suffi-
 “ cient quantity, I have no doubt that our regiment would have
 “ been saved from much of the sickness which we have since
 “ experienced, and it would, perhaps, also have prevented the
 “ necessity of losing one or two valuable lives.

“ Immediately after our supply was exhausted, or very soon
 “ afterwards, *the number of sick increased,* and our reports show
 “ an average of about fifty men returned to quarters.”

DISPOSITION OF THE SICK.

Of the average number on the sick list, for the entire number of regiments visited, 59 per cent. are represented as sick in quarters, 24 per cent. in regimental hospital, and 17 per cent. in general hospital.

Returns for the months of September and October, 1861, of six general hospitals at Washington, Georgetown, and Alexandria, yield the following tabulated results :

	September.	October.
Aggregate of cases treated in hospitals -----	2078	1963

Proportion to every 1000 treated in hospitals during the month.

Remaining at previous report -----	445	469
Admitted during the month -----	555	531
	<u>1000</u>	<u>1000</u>
Convalescents sent to Baltimore and Annapolis	187	221
Returned to duty -----	294	261
On furlough -----	8	8
Discharged from service -----	8	3
Deserted -----	6	7
Died -----	54	54
Remaining at end of month -----	443	446
	<u>1000</u>	<u>1000</u>

Proportion to 1000 remaining sick.

Sick -----	650	571
Convalescent -----	350	429
	<u>1000</u>	<u>1000</u>

Thus it appears that the number of cases treated in the month of October (1963) in the general hospitals above mentioned was somewhat smaller than that of September (2078); that the proportion of patients transferred to the convalescent hospitals at Annapolis and Baltimore was somewhat greater in October (221 per 1000) than in September (187 per 1000); that a somewhat smaller proportion returned to duty; that the proportions absent on furlough, the proportions who deserted, the rates of mortality, and the proportion of cases remaining in the hospi-

tals, at the end of the respective months, do not appreciably differ. The proportion of convalescents among those remaining in hospital at the end of the month was larger for October (429 per 1000) than for September (350 per 1000.)

It also appears that the average period of continuance of patients in these general hospitals is twenty-four (24) days.

Prevalent Diseases.—The following is a statistical classification of the diseases and casualties of forty-seven regiments of volunteers and two of regulars, during periods averaging forty days for each regiment, between July 1st and October 1st, 1861.

The classification adopted is that used in the British army, and for civil registration in England, Australia, and several of the States of the Union.

The imperfect nomenclature which the regimental surgeons are obliged to adopt under the existing regulations, is necessarily followed, the Latin, however, being generally translated.

The data are taken from the consolidated returns of the regimental surgeons to the medical directors of the military departments of the Potomac, and of the West.

The present army classification and nomenclature of diseases originated a century ago, when pathological science was much less advanced than at present; it is comparable with the present system of no other army, and is universally considered by medical statisticians to be very defective. The adoption of a more complete and accurate system of army vital statistics is respectfully advised, analogous to and comparable with the systems in use in other civilized countries. If it is desired that the records of the medical department shall contribute to the advance of the science of preserving human life, the importance of a change by which they may be more readily compared with those of other armies and communities is too obvious to need argument.

Diseases and Casualties of the Army statistically classified.

CLASS.	ORDER.	Diseases, etc.	NUMBER OF CASES TREATED.		
			Army of Potomac.	Army of the West.	Aggregate.
		ALL CASES.....	15,439	12,215	27,654
		SPECIFIED CASES.....	15,439	12,087	27,526
		(Classes.)			
I		ZYMOTIC DISEASES.....	9,437	9,228	18,665
II		CONSTITUTIONAL DISEASES.....	193	77	270
III		LOCAL DISEASES.....	4,737	2,086	6,823
IV		DEVELOPMENTAL DISEASES.....	520	427	947
V		VIOLENCE.....	552	269	821
		(Orders.)			
I	1	<i>Miasmatic</i>	8,821	9,065	17,886
	2	<i>Enthetic</i>	551	132	683
	3	<i>Dietic</i>	53	30	83
	4	<i>Parasitic</i>	12	1	13
II	1	<i>Diathetic</i>	86	25	111
	2	<i>Tubercular</i>	107	52	159
III	1	<i>Nervous System</i>	1,122	276	1,398
	2	<i>Organs of Circulation</i>	51	9	60
	3	<i>Respiratory Organs</i>	817	276	1,093
	4	<i>Digestive Organs</i>	1,757	1,237	2,994
	5	<i>Urinary Organs</i>	107	33	140
	6	<i>Generative Organs</i>	97	23	120
	7	<i>Organs of Locomotion</i>	149	27	176
	8	<i>Integumentary System</i>	637	205	842
IV	1-3	Not occurring in the army.....	-	-	-
	4	<i>Diseases of Nutrition</i>	520	427	947
V	1	<i>Accident and</i> }.....	551	268	819
	2	<i>Battle</i> }.....	-	-	-
	3	<i>Homicide</i>	-	-	-
	4	<i>Suicide</i>	-	1	1
	5	{ <i>Punishment and</i> <i>Execution</i> }.....	1	-	1
		Causes not specified.....	-	128	128

DISEASES AND CASUALTIES—Continued.

CLASS.	ORDER.	Diseases, etc.	NUMBER OF CASES TREATED.		
			Army of Potomac.	Army of the West.	Aggregate.
		(Diseases.)			
		CLASS I.—ZYMOTIC.			
		ORDER 1.— <i>Miasmatic.</i>			
I	1	Small-Pox	-	-	-
		Varioloid.....	-	-	-
		Measles.....	224	482	706
		Scarlet fever	-	1	1
		Quinsy.....	183	20	203
		Mumps.....	127	54	181
		Influenza.....	17	-	17
		Catarrh.....	626	171	797
		Ophthalmia.....	97	140	237
		Typhoid fever	156	131	287
		Typhus.....	1	14	15
		Congestive fever.....	-	18	18
		Continued fever.....	-	39	39
		Erysipelas.....	37	16	53
		Carbuncle.....	81	4	85
		Dysentery	618	527	1,145
		Diarrhœa.....	3,667	3,362	7,029
		Cholera morbus.....	259	23	282
		Cholera Asiatica.....	1	-	1
		Intermittent fever.....	1,178	2,868	4,046
		Remittent fever.....	639	839	1,478
		Yellow fever	-	-	-
		Rheumatism.....	720	163	883
		All other fevers.....	190	193	383
		ORDER 2.— <i>Enthetic.</i>			
I	2	Gonorrhœa.....	308	63	371
		Syphilis.....	159	57	216
		Bubo	54	6	60
		Stricture of urethra.....	29	3	32
		Cachexia.....	1	3	4
		ORDER 3.— <i>Dietic.</i>			
I	3	Scurvy.....	4	21	25
		Alcoholism	49	9	58
		ORDER 4.— <i>Parasitic.</i>			
I	4	Worms	12	1	13

DISEASES AND CASUALTIES—Continued.

CLASS.	ORDER.	Diseases, etc.	NUMBER OF CASES TREATED.		
			Army of Potomac.	Army of the West.	Aggregate.
		CLASS II.—CONSTITUTIONAL.			
		ORDER 1.— <i>Diathetic.</i>			
II	1	Gout	1	-	1
		Lumbago	73	19	92
		Anasarca	10	6	16
		Cancer	-	-	-
		All other diseases of this order.	2	-	2
		ORDER 2.— <i>Tubercular.</i>			
II	2	Scrofula	14	7	21
		Phthisis, (consumption of lungs).....	51	19	70
		Hæmoptysis	21	11	32
		Anæmia	21	15	36
		CLASS III.—LOCAL.			
		ORDER 1.— <i>Nervous System.</i>			
III	1	Apoplexy	3	-	3
		Headache	281	51	332
		Inflammation of Brain	7	-	7
		Chorea, (St. Vitus' dance)	3	-	3
		Epilepsy	29	7	36
		Sun-stroke	31	7	38
		Spinal irritation	9	-	9
		Mania	3	-	3
		Melancholy	7	5	12
		Neuralgia	120	73	193
		Paralysis	4	1	5
		Nyctalopia	1	-	1
		Hemeralopia	-	1	1
		Retinitis, (inflammation of retina).....	97	-	97
		Iritis	5	1	6
		Amaurosis	-	1	1
		Cataract	4	-	4
		Earache	105	6	111
		Otitis, (inflammation of ear).....	67	8	75
		Otorrhœa, (discharge from ear).....	75	1	76
		Deafness	10	2	12
		Delirium tremens	12	8	20
		Nostalgia, (home sickness).....	-	-	-
		Toothache	185	73	258
		Tetanus	-	2	2
		All other diseases of this order.	64	29	93

DISEASES AND CASUALTIES—Continued.

CLASS.	ORDER.	Diseases, etc.	NUMBER OF CASES TREATED.		
			Army of Potômac.	Army of the West.	Aggregate.
		CLASS III.—LOCAL—Continued.			
		ORDER 2.— <i>Organs of Circulation.</i>			
III	2	Aneurism.....	-	-	-
		Angina pectoris.....	2	2	4
		Carditis.....	9	-	9
		Endocarditis.....	1	1	2
		Pericarditis.....	3	-	3
		Inflammation of Vein.....	-	1	1
		Varix.....	19	4	23
		Hæmatocele.....	2	-	2
		All other diseases of the organs of circulation.....	15	1	16
		ORDER 3.— <i>Respiratory Organs.</i>			
III	3	Asthma.....	20	3	23
		Bronchitis acute.....	350	140	490
		“ chronic.....	65	14	79
		Laryngitis.....	22	2	24
		Pleurisy.....	112	29	141
		Pneumonia, (inflammation of lungs)...	45	41	86
		Hydrothorax.....	-	-	-
		Epistaxis, (bleeding at the nose).....	27	-	27
		All other diseases of respiratory organs.....	176	47	223
		ORDER 4.— <i>Digestive Organs.</i>			
III	4	Constipation.....	629	505	1,134
		Colic.....	334	82	416
		Dyspepsia.....	158	19	177
		Enteritis, (inflammation of bowels)..	19	2	21
		Gastritis, (inflammation of stomach)...	39	18	57
		Hæmatemesis.....	8	2	10
		Inflammation of liver, acute.....	38	218	256
		“ “ chronic.....	32	42	74
		Fistula.....	35	-	35
		Jaundice.....	33	50	83
		Peritonitis.....	15	-	15
		Splenitis, (inflammation of spleen).....	2	30	32
		Hernia.....	97	9	106
		Hæmorrhoids.....	141	33	174
		Prolapsus ani.....	• 12	-	12
		Ascites.....	1	-	1
		Other diseases of digestive organs.....	164	227	391

DISEASES AND CASUALTIES—Continued.

CLASS.	ORDER.	Diseases, etc.	NUMBER OF CASES TREATED.		
			Army of Potomac.	Army of the West.	Aggregate.
		CLASS III.—LOCAL—Continued.			
		ORDER 5.— <i>Urinary Organs.</i>			
III	5	Calculus.....	10	-	10
		Inflammation of bladder.....	6	1	7
		Diabetes.....	6	-	6
		Enuresis.....	7	5	12
		Ischuria et Dysuria.....	23	10	33
		Inflammation of kidney.....	25	8	33
		Ulcus penis non syphiliticum.....	19	1	20
		Other diseases of the urinary organs...	11	8	19
		ORDER 6.— <i>Generative Organs.</i>			
III	6	Varicocele.....	27	2	29
		Orchitis.....	63	19	82
		Sarcocele.....	2	-	2
		Hydrocele.....	5	2	7
		ORDER 7.— <i>Organs of Locomotion.</i>			
III	7	Hydrarthrus.....	17	2	19
		Anchylosis.....	13	-	13
		Exostosis.....	4	1	5
		Necrosis.....	3	-	3
		Other diseases of this order.....	112	24	136
		ORDER 8.— <i>Integumentary System.</i>			
III	8	Abscess.....	133	51	184
		Whitlow, or felon.....	79	6	85
		Phlegmon.....	63	20	83
		Ulcer.....	116	50	166
		Tumor.....	7	-	7
		Other diseases of the integumentary system.....	239	78	317
		CLASS IV.—DEVELOPMENTAL.			
		ORDER 1-3.—(Not applicable to the Army.)			
		ORDER 4.— <i>Diseases of Nutrition.</i>			
IV	4	Atrophy and debility.....	520	427	947

DISEASES AND CASUALTIES—Continued.

CLASS.	ORDER.	Diseases, etc.	NUMBER OF CASES TREATED.		
			Army of Potomac.	Army of the West.	Aggregate.
		CLASS V.—VIOLENCE.			
V	1	Burn, scald.....	20	5	25
		Concussion of brain.....	5	-	5
		Compression ".....	1	2	3
		Contusion.....	135	102	237
		Fracture.....	15	6	21
		Frost.....	1	1	2
		Dislocation.....	21	14	35
		Partial Dislocation.....	51	33	84
		Lacerated or contused wound.....	84	24	108
		Wound by puncture.....	23	8	31
		Gunshot wound.....	50	18	68
		Poison.....	6	5	11
		Wound by incision.....	60	36	96
		Bite of Serpent.....	-	-	-
		Other injuries of this class.....	79	14	93
V	4	SUICIDE.....	-	1	1
V	5	PUNISHMENT AND EXECUTION.....	1	-	1
		Diseases not specified.....	-	128	128

On the next page is a table by which the distribution, according to Statistical Classes, of the diseases and casualties of the same portion of the forces of the United States (1861) may be compared with those of the British army when in the Crimea.

*Number of Diseases and Casualties of each Class and Order to
1,000 cases treated.*

CLASS.	ORDER.	DISEASES, ETC.	Army of Poto- mac.	Army of the West.	Total.	Army of the Crimea, April 10, 1854, to June 30, 1856.
		ALL SPECIFIED CASES.....	1000	1000	1000	1000
I		ZYMOTIC DISEASES.....	611	764	678	698
II		CONSTITUTIONAL DISEASES.....	12	6	10	5
III		LOCAL DISEASES.....	307	173	248	156
IV		DEVELOPMENTAL DISEASES.....	34	35	34	1
V		VIOLENCE.....	36	22	30	140
		(Orders.)				
I	1	<i>Miasmatic</i>	571	750	650	673
	2	<i>Enthetic</i>	36	11	25	23
	3	<i>Dietic</i>	3	3	3	2
	4	<i>Parasitic</i>	1	-	-	-
II	1	<i>Diathetic</i>	5	2	4	3
	2	<i>Tubercular</i>	7	4	6	2
III	1	<i>Nervous System</i>	73	23	51	25
	2	<i>Organs of Circulation</i>	3	1	2	2
	3	<i>Respiratory Organs</i>	53	23	40	16
	4	<i>Digestive Organs</i>	114	102	109	29
	5	<i>Urinary Organs</i>	7	3	5	1
	6	<i>Generative Organs</i>	6	2	4	-
	7	<i>Organs of Locomotion</i>	10	2	6	1
	8	<i>Integumentary System</i>	41	17	31	82
IV	4	<i>Diseases of Nutrition</i>	34	35	34	1
V	1	<i>Accident and</i> }.....	36	22	30	{ 15
	2	<i>Battle</i> }.....				
	3	<i>Homicide</i>				
	4	<i>Suicide</i>				
	5	{ <i>Punishment and</i> <i>Execution</i> }.....				

NOTE.—This table may be read thus: Of every 1000 cases of disease and casualty occurring in the army of the Potomac, 611 were of the class called the Zymotic, (comprising epidemic, endemic, and contagious diseases.)

571 of these Zymotic diseases were of the Miasmatic order.

Tendencies of Disease.—Diseases of a malarial type, which till recently have most given occasion for anxiety, are now beginning somewhat to decline. On the other hand, there is a slight but appreciable increase in cases of disease appropriate to the winter months, as severe colds, inflammations, pulmonary affections, and acute rheumatism.

Typhus.—To this must unfortunately be added a decided increase of typhus fever. This term is used to indicate not the typhoidal aspect occasionally assumed by other forms of disease, but the formidable and infectious disorder, known, according to the conditions that produce it, as “camp fever,” “ship fever,” “hospital fever,” &c. Its appearance is traceable to the natural disposition of soldiers to shut themselves up in their tents or huts as much and as closely as possible in cold weather. In many camps they have already been allowed to commence a system of suicide by excavating the ground within their lodgings, and throwing up banks of earth against their walls or curtains. This practice, which, as is well known, occasioned a great loss of life in the British army during the Crimean war, should be at once forbidden, and full ventilation of tents at night made compulsory, even at some real or imaginary expense of comfort. The Inspectors of the Commission are unable to act with adequate effect against this danger. An extensive outbreak of typhus would be exceedingly demoralizing as well as destructive, and it would be better that double or triple the usual allowance of blankets and of flannel shirts should be distributed to the men in camps, even if the issue should be left behind or thrown away at the first movement, than they should be indulged in their disposition to burrow or seal themselves in their lodgings.

Measles and Small-Pox.—Measles and small-pox are also common, the latter sufficiently so to justify uneasiness. Inspectors

of the Commission have been called upon by regimental surgeons almost daily during the last month, for a supply of vaccine virus, the reason assigned by them being that it could not be obtained from the Medical Bureau. The supply at Washington, under the control of the medical authorities, was reported to be entirely exhausted on the 6th inst. There has been no general re-vaccination in the army, and many regiments are now in serious danger from this disease.

The Commission has constantly urged the importance of attention to this subject, and has been partially able to supply the existing deficiency, by purchasing and issuing to regimental surgeons the vaccine matter they stated themselves unable to obtain from the regular sources. Its organization and means are, of course, not sufficient to comprehend the whole army. It has, however, provided for the vaccination of more than twenty thousand men.

Most cases of small-pox that have occurred in the army of the Potomac are attributed by the regimental surgeons to the absence of means for a proper isolation of the sick. Small-pox patients have been conveyed to general hospital in the ambulances and on the cushions used by the sick and wounded generally. What is still more unfortunate, all cases of eruptive disease have hitherto been accommodated in one special hospital. In this hospital, overcrowded* and most imperfectly

* The overcrowded condition of the hospital has frequently led to the discharge of patients before their convalescence was established. While this report is preparing, the following statement is made by an inspector, in connection with his return for a New York regiment:

“I observed the funeral of a soldier in progress, and asking for a history of his case, received the following statement from the colonel and surgeon: A few days previous he had been sent to the hospital for eruptive diseases at ‘Kalorama.’ He was, when sent, in the early stages of measles. On the evening of the day thereafter, to the surprise of the surgeon, he reappeared in camp, in an exhausted and distressed condition. He said that he had

provided with bedding and supplies of every description, all cases of eruptive disorders have been placed in close juxtaposition and without adequate precautions against the communication of small-pox to patients under treatment for other diseases.

As a natural consequence of this oversight, several instances have occurred during the last two months in which patients discharged from this hospital cured of measles, &c., have, on rejoining their regiments, been attacked with small-pox, apparently contracted in hospital, and have communicated it to their comrades.

The following cases of small-pox have been reported to the Commission by the surgeons of the respective regiments, as directly traceable to this cause, viz :

In the 8th regiment Maine Volunteers.....	7
8th " New Jersey "	3
1st " New York Artillery.....	3
Harris's Light Cavalry.....	2
7th regiment Wisconsin Volunteers.....	9
19th Indiana Volunteers	5

And it is to be feared that the list could be enlarged by special inquiry.

The disease has been communicated to the 4th Pennsylvania cavalry by one of these regiments encamped near it. Of the nine men belonged to the Wisconsin regiment, three have died, and the same number of the Indiana regiment. In the 8th regiment of Maine Volunteers, the disease communicated to them broke out when they were on the eve of their depar-

been discharged from the hospital, and, in the evening of a December day, obliged to walk back to his regiment. He was immediately taken to the regimental hospital, and assiduously attended upon. But notwithstanding all efforts to save his life, he died during the same night from bronchial and laryngeal congestion consequent upon exhaustion and exposure."

ture from Annapolis for Port Royal, and the most serious mischief was only prevented by the energetic action of Dr. Cooper, the Medical Director of that expedition, who instantly transferred all who had been in any way exposed to infection from camp to the navy yard. Nevertheless, the 21st Massachusetts regiment, then engaged in guard duty at the navy yard, was infected, and up to the 28th November, twenty-five cases of variolous disease had occurred among the troops at Annapolis, five of which proved fatal.

The 8th Maine did not entirely escape the disease even after leaving all supposed to be infected behind. The last arrival from Port Royal brings news of the death of one member of that regiment, and of three deaths in the Michigan 8th from varioloid.

MILITARY HOSPITALS.

At the close of the October session of the Commission it was understood that Government would at once commence the erection of two cheap temporary model hospitals at Washington, in conformity with plans carefully prepared by a committee of the medical members of the Commission, and approved by it as embodying the latest results of sanitary science. These plans have been formally approved by the Quartermaster General, the Commander in Chief, and the Medical Director of the army of the Potomac, and the ground for the example buildings has been staked out. But their erection is not yet commenced. As the Commission believe that a large amount of hospital space of the character provided for in these plans is urgently demanded from considerations of economy as well as of humanity, it is hoped that there will be no unnecessary delay in their completion and equipment.

Defects in present Hospital Arrangements.—The defects and sources of mischief in the general hospitals at and around Washington and elsewhere, which have been under consideration by the Commission at each of its sessions, and against which it has repeatedly remonstrated, continue without material change. An unfortunate personal difficulty between two medical officers of high position is believed to stand in the way of the measures necessary to bring these establishments up to anything approaching the lowest standard that would be tolerated in any civil hospital.

No fact in sanitary science is better established than this, that old buildings, such as hotels, academies, store-houses, &c., are, from their want of systematic ventilation and other reasons, most unfit to be used as hospitals on any large scale, and that, even in inclement weather, tents or the rudest shanties are preferable. During warm weather, while every door and window is kept open, especially if the buildings are newly occupied, the evil is less felt; but in the winter months, when doors and windows are sure to be kept closely shut, it is almost certain to show itself in the form of hospital fever, erysipelas, and other formidable diseases, and in the general depression and tedious convalescence of those patients who escape them. The Commission has formally applied to the Medical Bureau to take steps to improve the ventilation of these buildings occupied as hospitals near Washington. Some steps have been taken to this end, but they are reported by the Inspectors of the Commission to be inadequate.

Complaint is made by officers of the Medical Bureau that regimental surgeons are tardy in sending their sick to general hospitals—that they are often detained in regimental hospitals till past cure. A large portion of the mortality in general hospitals is thought to be accounted for by this alleged fact.

This tardiness is in many cases to be explained by the feeling

of discouragement frequently expressed by regimental surgeons in regard to general hospitals. Men sent to these establishments when laboring under the severest forms of disease are reported to have been frequently turned from their doors, after a long and tedious journey, and sent back to their regiments, because the hospital was full, or because there was some formal defect in their papers. In some instances, such men have spent the night in an ambulance at the hospital door.

Relations between General and Regimental Hospitals.—It is manifest that the relations between general and regimental hospitals, and between the surgeons of regiments and those in charge of general hospitals, are in an unsettled condition, which practically leads to great suffering and the loss of many lives.

Technical Difficulties in the Hospital System.—Mere technical defects and irregularities in the permits for admission to general hospitals, and also in the requisitions of regimental surgeons for their medicines and other supplies, are the daily cause of much mischief, and of what seems most unnecessary suffering.

This will be best illustrated by a statement of a single case which happens to be reported by the surgeon interested while this portion of the report is in preparation. It is by no means of peculiar or unusual hardship, and is merely a specimen of hundreds in which the Commission has been appealed to for relief.

A volunteer surgeon, whose regiment is encamped at a distance of several miles from the depot of military supplies for his division, and who has in his hospital a large number of sick requiring his constant personal attention, applies to the proper officer for a hospital stove. His requisition is in all respects regular, except that he has forgotten or neglected to get it countersigned by the

general commanding his brigade. It is, therefore, handed back to him for correction. He returns to camp. After spending at least another day in pursuit of this officer, he succeeds in finding him, in getting access to him, in gaining his attention, and obtaining his approval and the required signature. He devotes another day to another expedition to headquarters with his wagon for the transportation of the stove, and presents his requisition as amended. The name of the brigadier general appended to it is well known. But the requisition is still defective. The general has hastily subscribed his name in the proper place upon the printed blank, but has neglected to append his title. For this reason, as the surgeon is given to understand, the stove cannot be issued, and he goes back to camp without it to spend two or three days more in pursuit of the general.

Whether the sick men in this regiment sustained serious harm or any harm from the absence of the stove, or for want of the stove, it is needless to inquire. They certainly may have suffered fatally. Unless the surgeon considered a stove necessary for them, it is to be presumed he would not have taken all this trouble to procure one. But many analogous cases have been reported to the Commission, in which hospital patients were in imminent danger from like delays, and in which the Commission has supplied from its own stores the few dollars' worth of necessaries required to save them.

There is little room for doubt that many lives have already been lost from mere technical and formal obstacles to their preservation. It is respectfully submitted that some remedy should be applied to this evil. The inevitable consumption of life in military hospitals is sufficiently appalling without any increase from merely artificial difficulties. Official forms and rules are indispensable to the Medical Bureau and Quartermaster's

Department, as to every other department of Government, and all who hold official relations with either, are in duty bound, as rapidly as possible, to inform themselves as to the details of its system, and govern themselves accordingly. But if this system be not adapted to the new order of things, and to the wants of the volunteer army—a question on which it is not intended to express an opinion—it seems plain that the system should be changed.

If the regulations to which surgeons must conform before they can obtain medicines for their patients be too complex and elaborate for the comprehension of the average volunteer surgeon, without military education or experience, the interests of half a million volunteer soldiers require that these regulations be revised and simplified, even at some little expense of official precision, and of checks against waste and improvidence.

If, on the other hand, these regulations be in fact fairly within the comprehension of any man of ordinary capacity who will take the trouble to study them attentively and learn his duty, volunteer surgeons should be expected and requested to comply with them, and any failures to do so, in matters involving the health or comfort of their patients, should subject them to military discipline.

A more liberal discretionary power should also be expressly vested in the Medical Bureau, in directors of hospitals, and in certain easily accessible officers of the Quartermaster's Department, to waive strict technical accuracy in requisitions for hospital supplies and in hospital permits, whenever they are satisfied that the interests of the service will suffer no substantial detriment.

MEDICAL AND SURGICAL SERVICE OF THE ARMY.

Regular Service.—Admission to the medical staff of the regular army is attained through a successful examination by a board of

army surgeons appointed by the Surgeon General on the order of the Secretary of War. The candidates approved by the board are entitled to appointment as assistant surgeons in the order of merit as vacancies occur. The test of fitness imposed by these army boards of examination has hitherto been a thorough one, and has secured to the service young men of more than average ability, who only need encouragement to advance in professional attainments, in order to maintain an eminent position as scientific physicians.

Unfortunately this encouragement is not afforded them. The policy of the Government has not heretofore been such as to develop a high degree of professional acquirement. The assistant surgeon, as soon as he is commissioned, has generally been sent to a distant frontier, where he serves for several years as physician at a small military post, the garrison of which rarely consists of more than two companies, often of one of only ninety men. As soon as convenient after five years' service, he has, after a short furlough, been submitted to examination for the grade of surgeon, which terminating in his favor, he is transferred to another frontier post, where he again passes several years without an opportunity of visiting any seat of medical learning, or of renewing by dissection, as he only can at a medical centre, his familiarity with practical anatomy. During most of this time his experience is, in many instances, limited to a small amount yearly of indigenous disease, and a few trifling accidents, and he is thus practically unfitted for professional responsibilities of a wider range.

The administrative duties of his office tend, at the same time, to interfere with the proper exercise of the higher scientific duties of his profession, and the careful preparation of a detailed monthly report often gets to be considered more creditable than the prevention, by professional foresight, of an epidemic. Thus the army surgeon, by the time he reaches middle life, is

in danger of becoming a mere routinest, mindful rather of the forms of business than of scientific advancement.

It is highly creditable to the medical corps of the army that this tendency of the system has been so well resisted by many of its accomplished members, and yet that such is its tendency can hardly be denied.

But the evil is not without remedy. The head of the Medical Bureau should be allowed to permit the surgeon, after stated periods of service, to devote a few months at some centre of medical instruction, where, by association with the learned and the progressive of his profession, his own ambition would be stimulated, and his professional knowledge extended. The British Government thus systematically detaches its medical officers from duty, that they may refresh and extend their knowledge by attendance on lectures, and by resorting to other means of instruction.

Other branches of the service have the stimulus to improvement, and the opportunity of securing it afforded by occasional furloughs, for the purpose of studying the art of war. The country has not forgotten the late military commission to Europe, the experience of which must have greatly enhanced the resources of its present commanding general. Was an army surgeon ever sent to Paris or Vienna to add to his scientific knowledge? The tendency of all work as a matter of routine is to dwarf the intellect and unfit it for broader views. Hence the greater need of occasional special culture. Beside the reasons which humanity urges in favor of securing the highest efficiency to the medical corps, there exists a claim to consideration in the fact, that, unlike the officers of the purely military arm of the service, who have been educated by Government at its Military Academy, the medical officers have educated themselves in an expensive learned profession.

The service could hardly fail to be benefited also by a reorgan-

ization which should create a body of inspectors-general, selected from the army surgeons, with increased assimilated rank, whose business it should be to inspect the condition of all camps, hospitals, barracks, stores, and supplies, and keep the head of the bureau constantly informed as to the sanitary condition of the army, and the provision for its needs, each season and station frequently having its special wants. This feature of organization, the necessity for which is recognized in every European army, seems necessary to conform the medical department to the purely military departments of the service, thorough inspection being elsewhere the stimulus to efficiency, the remedy for neglect, and the only means by which abuses will be removed. This function of inspectors-general is now blended with that of medical directors, who, being administrative officers on the staff of the commanding general, cannot command time for the thorough and close examination which, as experts, the inspectors-general should be required to make.

More frequent reports, made up of other than purely statistical matter, embracing reflections and investigations, as well as records of cases, would, if called for by authority, and circulated in and out of the army, furnish a valuable stimulus to the laudable ambition of the army surgeon.

Volunteer Service.—The surgeons of the volunteer army have been received, with its other officers and its privates, from civil life, either with or without examination. Where examination has been had, it has varied in degree, from the rigid tests imposed on candidates by the State examining board of Vermont, to a careless weighing of merit by which the imperfectly qualified impostor has not been found wanting. In most instances the colonel has nominated the surgeon, who has afterward been confirmed by the Governor of the State, with the approval of an examining board. Practically, the result is better than could

have been expected. About seven-eighths (7-8ths) of the surgeons and their assistants—and this is about the proportion who have undergone examination—seem to the inspectors of the Commission to be fairly qualified for their duties.

There are notable exceptions, however, to this general rule of competence. Two surgeons confessed that, until they were supplied with instruments by the Government, they had never seen an amputating knife. But the average grade of qualification, founded on both scientific attainment and practical experience, is reasonably high.

The fairly qualified surgeon is attached to his regiment, which has reached the column of the army of which it is to form a part. What facilities are his in the administration of his office? Having overcome the difficulties in the way of securing hospital tents for his sick, and recovered from his vexation at being denied one-fourth of the articles of medicine and of furniture, for which he had made requisition in conformity to the supply table, he endeavors, as best he may, to execute his trust. Shall he treat the sick as far as possible in the regimental hospital in camp? He often finds himself cut off from the use of medicines on which he has been accustomed to rely, (they are not mentioned in the supply table for field service,) and cannot obtain others, whose importance is recognized, in sufficient quantities from the medical purveyor. His instruments are often very poor; not at all fit for the uses for which they were designed. He finds the regimental quartermaster and the brigade commissary, both unwilling to be bankers for the Government, when he asks them to purchase, on account of his hospital fund, which from the savings of his rations he has accumulated on paper, such nutritious food as he may require for his sick. Often for that purpose no funds are available.

Shall he not then send all but the lightly sick to general hospital?

It is, perhaps, not the best place for them. The fever patients will not be benefited by the ride of six or eight miles in a jolting ambulance, and they cannot have, in the old public house or the narrow rooms of seminaries, now misnamed hospitals, the free ventilation so essential to them, which the regimental hospital tent affords.

But to secure to them more prompt supplies of appropriate medicine, and more varied and suitable food, and to avoid embarrassing the rapid movement of the regiment liable to be ordered forward, he applies to the medical director for a permit which shall admit his dozen most sick men to the general hospital, in the nearest town. That he sometimes meets delay in securing it, is not strange when regard is had to the amount of accommodation in the general hospitals and the numbers already there, together with the number in camps ill enough to require the surgeon's advice, and to be nursed in the hospital tent. By the statistics gathered by the Commission, it appears that nineteen men in each thousand enlisted are on an average constantly sick in regimental hospital. Could one quarter of that number find place in the general hospitals on the Potomac, for instance, in addition to their present population?

As the character of the regimental hospital must vary according to the mobility of the regiment, the season, the locality, the prevalent diseases, the proximity to available general hospitals, etc., a larger discretionary power should be accorded to the surgeon. The facility of adaptation to varying circumstances is an essential feature of a good hospital system.

The mutual relations of the surgeon and his assistant need to be more clearly defined.

The surgeon is at loss, moreover, as to his relation to the

surgeon of brigade, whom he finds on the staff of the brigadier general. The authority of that officer is very imperfectly defined, and he may often claim more than would be readily conceded.

To make the medical and surgical service of the volunteer army as efficient as the country has a right to expect it to be, there seems to be required a uniform and thorough examination of candidates for the post of surgeon and assistant surgeon, by a central board of United States army surgeons, if need be. This is the more important from the practical difficulty encountered in getting rid of incompetent surgeons. It is not an unknown thing for a board summoned to test the qualifications of a medical officer known to be unfit for the discharge of his duties, to report him as qualified, after which only a court martial can separate him from the service, and this he can easily avoid.

More ample provision should be made for the sick, both in camp and town hospitals. The supply table for the former should be revised.

It is submitted, indeed, that the entire medical supply table for post, field, and general hospitals ought to be carefully examined and revised by a competent board; and that, if it be found in any respect below the requirements of the latest and most enlightened medical science, it should be brought fully up to that standard. Surgeons of both the regular and volunteer forces constantly apply to the Commission for medicines and surgical and other appliances which they deem necessary for their patients, but which they cannot obtain through official channels. Argument is unnecessary that our soldiers, when suffering from wounds received, or disease contracted, in the national service, are entitled to expect from the nation the benefit of everything that the highest medical and surgical science can give them.

Transportation.—Transportation for the Medical Department of the army is at present very deficient, irregular, and bad of its kind, and should be improved and systematized. Instances have been credibly reported to the Commission, in which sick and dying men have been packed together in cars and canal boats, and detained for hours on their way, in a manner that (unless it arose from unavoidable accident) can only be characterized as shocking and inhuman. The Government two-wheeled ambulance, whether considered as a conveyance for the sick and wounded, or as a transport wagon, is too bad to be continued. In its place several additional four-wheeled ambulances should be given to each regiment, three or four horse-litters of the form shown in Delafield's report on European armies, figures 75 to 78, pending some better invention, and a supply of pack-mules with hampers; as wagons will often be impeded, broken, and rendered impracticable, in the rough roads, gullies, streams, and sloughs, constantly met in our Southern States.

These articles should, of course, be the exclusive property of the Medical Department, and a considerable proportion of the transportation belonging to the medical service of each command should be kept near the stationary or moving depôt of the Medical Purveyor of the Corps d'Armée, in order that requisitions, by courier or telegraph, may be immediately filled and despatched. (See Appendix: "*Ambulance.*")

VOLUNTEER HOSPITAL, AND OTHER SUPPLIES.

The Commission did not, at first, contemplate furnishing hospital and other supplies to the army on any large scale, but confined itself mainly to the duties of "inquiry and advice" assigned it by the Secretary of War. It could not refrain, however, without doing violence to the human sympathies of its members,

from supplying some few of the more pressing wants which they saw existing in the military hospitals of Washington and elsewhere. The absence of any hospital fund already referred to made these wants remediless, except by the Commission, or more properly, by the generous and patriotic people of the loyal States, whom the Commission represents as their agent and almoner.

The Commission thus found itself in a manner obliged to overstep its strict duty, and was induced to employ a number of experienced young men as hospital dressers; to provide for the washing of the clothing of patients and of the hospital bedding, bandages, and towels; to purchase water-beds for patients who had undergone amputation, and whose surgeons certified that they could not recover without them; to provide nurses possessed of skill for the handling of badly-fractured limbs; to engage the services of barbers to be constantly employed in the hospitals; to supply, from time to time, some small amount of stimulants, and medicines, and surgical appliances to surgeons who were unable to obtain them from the Medical Bureau, either from their own excusable ignorance of official forms, or because the stock at the disposal of the Bureau was exhausted; to provide some means of recreation for men with tedious wounds, and convalescents; to furnish letter paper, envelopes, pens, ink, and postage stamps, or obtain franks, for those wishing to communicate with their friends, or with the friends of more feeble comrades, etc., etc.

The distribution of stores, clothing, bedding, &c., to the hospitals, and occasionally and on special emergencies (as after the engagement at "Ball's Bluff") to soldiers in the field, has now become a recognized function of the Commission. It assumed it with the less reluctance, that some central agency was indis-

pensable to prevent a distressing waste of the supplies which the loyal women of the country were diligently providing for the army. Soldiers of one regiment were found to be over supplied, and throwing away the surplus or bartering it for liquor, while the hospital of some neighboring regiment was without beds, and its patients without a change of clothing.*

The Commission has, therefore, for some months past held itself ready to receive and to distribute where most required, among the soldiers of every portion of the army, all supplies, especially of hospital stores, which might be forwarded to its depots by the humane and charitable societies that are working for the army in every northern city, town, and village.

These supplies have been forwarded to it in large quantity.

The Quartermaster General having advertised for blankets from the private stocks of citizens, and having become acquainted with the method of action adopted by the Commission, has also directed that all blankets which shall thus be obtained by his agents shall be placed in the stores of the Commission, for gratuitous distribution, where found to be needed by the sick.

Depots of the Commission.—The principal depots of stores for the Commission are in New York, (under charge of the “Woman’s Central Relief Association,” of New York;) at Bos-

* As this is being written, word is received from the quartermaster of the Second Regiment New Hampshire Volunteers, that he has three or four tons of hospital stores which have been presented to the regiment, but of which it has no need, and which he finds it impossible to transport. As the regiment is ordered to move, he desires the Commission to relieve him of them. On the same day an urgent request has been received from several other regiments of the same division for much needed supplies.

Six days after the Commission had, by its agents, conveyed to the wounded at the battle of Ball’s Bluff three wagon loads of comforts, the first box arrived, sent by friends at home for their relief.

ton, at Providence, R. I. ; at Philadelphia; at Cincinnati; Cleveland, and Columbus, Ohio; at Wheeling, Va. ; at Louisville; at Chicago; at Cairo; at St. Louis, and at Washington.

Freight.—The freight on these supplies has been in many cases necessarily paid by the Commission. This source of expense, however, will be diminished by the liberality of the directors of most of the principal railroad lines, on which supplies consigned to the Commission will hereafter be conveyed at reduced rates.

Amount of Supplies Distributed.—The demand for articles of clothing and protection for the sick has naturally increased during the past month, but the means placed by the community at the disposal of the Commission has enabled its Inspectors to keep pace with this increase. Thirty-four thousand four hundred and eighty-one articles of hospital clothing were distributed from the Washington depot alone during the month of November, besides a large bulk of unclassified articles.

The supplies thus distributed from the Washington depot have been issued to one hundred and thirty-six hospitals; twenty of which were general, and one hundred and sixteen regimental. The average number of articles supplied to each was a little more than two hundred. About one thousand are now daily distributed from the same depot, and their value in money is not less than five hundred dollars.

At the Cleveland depot sixty-nine thousand articles have been received since its organization; and fifty-one thousand, besides several tons of articles of hospital diet, have been already issued from it to the army of the West, at various points.

From the Wheeling depot, four thousand eight hundred and fourteen articles of bedding and clothing, alone, have been distributed.

Accurate returns have not yet been received from other depots, but there can be little doubt that the value of supplies issued to the army, by agents of the Commission, during November, amounted, at a very moderate estimate, to the sum of forty thousand dollars.

System of Distribution.—It is the duty of the Commission to prevent, as far as possible, the sacrifice of human life to matters of form and considerations of accuracy of accounts. Its method of distribution is as thorough and exact as can be maintained consistently with this duty.

This department of its business has so greatly increased of late that it has been difficult to enlarge its clerical organization with corresponding rapidity. Vouchers signed by the surgeon, or his assistant, of every regiment or hospital aided, and countersigned by an inspector of the Commission, who has ascertained that the articles supplied are actually needed, have been obtained, however, for every dollar's worth issued at all the depots directly controlled by the Commission.

Caution is exercised in the distribution of the gifts of the people, chiefly in the following particulars:

1. That they should be as fairly divided as is practicable—those most needy being most liberally dealt with;
2. That no officer shall be unnecessarily relieved from an existing responsibility to secure for all dependent on him all the supplies which it is his right and duty to demand directly of Government.

Reserve Stock of Supplies.—The reserve of stores at the disposal of the Commission is still smaller than it should be. The demand caused by the comparatively trifling engagement

at Ball's Bluff exhausted its supply of various articles urgently required, and obliged it to purchase what was still needed in the shops of Washington. Had this battle been followed up by a general advance, or had a general engagement on the Potomac taken place, it is morally certain that many hundred, if not thousand men would have perished for the want of hospital supplies and medicines. Neither Government, nor the Commission, nor the shops of Washington, could have furnished one quarter part of what would have been required, especially if a national victory had thrown the enemy's wounded on the hands of the Government. It is true that Government could have telegraphed to Baltimore, Philadelphia, and New York for additional supplies; but these could not probably have been obtained in considerable quantity for several days; and if only forty-eight hours elapsed before their receipt, hundreds of wounded men would have died from mere want of medicine, bedding, and bandages.

Insufficiency of Government Supplies on hand.—The Commission feels that the duty assigned it by the War Department requires it to protest, as it has already protested, against the grossly inadequate provision for the contingency of a general action which, certainly existed during the summer and autumn, and which it believes still to exist.

To illustrate the extent of this deficiency, it is only necessary to say that the Medical Bureau was obliged to call on the Commission to supply lint and bandages for a few wounded men brought into hospital after one of the petty skirmishes that occurred in September last.

The possibility of an engagement on our own soil at any moment, between two armies of one hundred and fifty or two hundred thousand men each, is so strange a novelty that we naturally fail to appreciate its inevitable consequences, and the

immense amount of human suffering which must follow it. The battle of Bull Run has not taught us the lesson, because most of our wounded were then left on the field. Few of the more serious cases reached our hospitals. We must remember that the experience of foreign armies shows that, after a well-contested battle on this scale, we must count on having, at the very least, from twenty to thirty thousand men crying to us for relief from agony.

Supplies for Men in the field.—The Commission has, by circulars and advertisements, given the widest publicity to the need of hospital supplies at all its depots, specifying particularly the nature, dimensions, form, &c., of the articles especially needed; and, as has already been stated, this appeal has been most generously answered. It has had under consideration the expediency of making a like call on the loyal women of the country for extra clothing for men in the field. After advisement with the Quartermaster General, this has been thought inexpedient, except (to a limited extent) in the West, where delays and irregularities of transportation may retard the supply through the regular channels of Government. Our soldiers are far better paid than those of any European army, and wherever these extra articles of clothing can be obtained through their regimental quartermasters, their value being deducted from the soldier's pay, it is in the highest degree unfavorable to the development of true military habits, that they should seem to be furnished them as a kind of charity.

The Commission, however, is in constant receipt, at Washington and elsewhere, of considerable supplies of this class, which it distributes in cases of emergency. (See Appendix: *Volunteer Army Supplies.*)

SPECIAL RELIEF TO VOLUNTEERS IN IRREGULAR CIRCUMSTANCES.

The attempt has been made to suddenly stretch a system designed to supply the wants of a well-organized army of less than twenty thousand men under thoroughly-trained officers, to make it sufficient for the wants of six hundred thousand civilians rushing together in arms, all at once, with no officers acquainted with the forms of administrative duty for an army, but only leading men from among themselves, and of their own selection, to take the duty of officers in that system. The population of a large town has been all at once set down here and there, in various parts of the country retired from the grand routes of communication, and from all adequate avenues for the supply of their subsistence. Rogues and traitors have seen their opportunity in this state of things. Fools and indolent men have been swept, in the many eddies of the grand purpose which formed the central current, into places where great wisdom, activity, and energy would have failed to meet every pressing need.

That men everywhere, throughout these wonderful multitudes, are daily suffering from the ignorance, neglect, mistakes, and impositions of their officers and of each other, is a matter of course.

The agents of the Commission, limited in numbers, and sorely limited in means, have yet been able, in ways innumerable, and in many which cannot even be alluded to by a general indication of their character, to administer some measure of assistance and relief in many thousands of these cases.

A brief description of one of the more systematic methods in which the Commission has thus more than justified all the hopes of a beneficent result which were entertained at its organization, is all that can be attempted in this report.

The main purpose had in view, in the agency referred to, has been to lessen the hardships to which the ignorance of the sick volunteers and their officers, of the forms and methods of Government, make them subject while in the city of Washington, and to provide for certain wants of the volunteers, when detached from their regiments, for which the Government arrangements had been inadequate, and which the regular inspectors of the Commission, in their visits to camps and hospitals, could not attend to.

Practically, the chief duty has been—

First. To supply to the sick men of the regiments arriving in Washington such medicines, food, and care as it was impossible for them to receive, in the midst of the confusion, and with the lack of facilities, of their own officers.

Second. To furnish suitable food, lodging, care, and assistance to men discharged from the general hospitals, or from their regiments, but who are often delayed for a number of days in the city before they obtain their papers and pay.

Third. To give assistance and information, and secure transportation to men who arrive at the railroad station in small numbers, and want to find and join their regiments. Some of these are men accidentally left behind; some are men who have been detained by order for a few days at hospitals in Philadelphia or Baltimore.

The building near the railroad station, occupied by this agency, is furnished the Commission by Government. From its occupation for this purpose on the 9th of August last, up to the 9th of December instant, four thousand and forty nights' lodgings have been furnished to seventeen hundred and ninety soldiers, mostly laboring more or less under disease, who would, if without this resource, have been obliged to sleep on the floor of the reception house or in places of great exposure. Many have re-

mained in it several days, receiving medical care from a physician of the city, employed by the Commission.

This has been done at an aggregate expense of about fifteen hundred dollars.

This agency also aids soldiers passing through the city on their return to their regiments from general hospitals, or passing through the city on sick leave, and in various ways that cannot be classified under any general head, but which have certainly prevented a large amount of sickness and suffering.

This will be best illustrated by extracts from two reports made to the Commission by the Inspector in charge of this agency.

“When the regiments, whose sick men we had charge of, went to camps, they usually carried their sick with them, unless the men seemed too feeble to go; in which case we saw that the men were taken to a general hospital, or else we kept them in charge a few days longer, until the regimental hospital could be put into a comfortable condition.

“Sometimes the sick of a regiment just arrived occupied a separate passenger car, and remained in the car until the regiment moved; in that case we supplied them with tea and coffee and needed refreshments in the car.

“Often the surgeon of the regiment had no medicine at hand for the sick, it being locked up in his chest, which could not be reached in the baggage car. In that case we obtained for him such medicines as immediate needs required.

“When we found men from general or regimental hospitals waiting to get their discharge papers filled out, and for their pay, we took them in charge, sheltered and fed them, and if they needed help, we rendered it.

“When we found men who were too weak to bear the fatigue of going with their papers, we took charge of the papers ourselves, had them filled up, obtained the signature of the men to blank receipts for money due to them by Government, and thus, by consent of the paymaster, received the money, and paid it over to the men. This privilege could only be granted in cases of absolute necessity.

“When we found men seeking their regiments, we directed them, (from a record of the location of the various regiments kindly

furnished us by General Williams;) if they needed money, we gave it to them; if they were weak, obtained an order for an ambulance, or an army wagon, or a railroad pass, by which they were sent to their respective stations.

“In many cases, men who were discharged left their regimental hospitals sadly in need of clean garments, especially shirts, stockings, and drawers. In such cases, before they started for home, we made the men clean and comfortable.

“When we found men at the reception buildings in need of medical treatment, but not sick enough to be sent to the general hospital, we called in a physician, unless their own surgeon could be obtained.

“It is not the plan to consider this, in any sense, a *hospital*, but only as a place where the weak can rest and be cared for, and the sick remain awhile until they are otherwise provided for, and also where those returning home, who have no claim upon hospital, or camp, or station-house, may be sheltered if obliged to remain near the station more than six hours. Therefore, as a general thing, men will remain in the house but one, two, or three days at any given time.”

* * * * *

“Within the past three weeks, we had a new class, viz: men belonging to regiments moving from Washington to Annapolis for special service. A number of cases have occurred where the regiments have struck their tents and marched to the railroad station, bringing all their sick with them in ambulances, expecting to take the cars at once; but they were detained there waiting sometimes for twenty-four hours. In such cases we have immediately received the sick into the house; and there they remained until the train which was to take them was ready to start. Some nights we had as many as twenty such from one regiment, who otherwise (though just removed from a regimental hospital) would have been obliged to have slept on the floor of the reception-house, or else in the army wagons and ambulances. Many of these were men who needed all the care we could give them.”

* * * * *

“Sept. 11th. There were last night in the “Soldiers’ Home,” as we now call it, twenty-five men resting. Among them were a number of Berdan’s Sharpshooters; none of them were sick enough to go to a hospital, but some of them will doubtless be saved from serious illness by two or three days of rest and care. These men represent a large class of soldiers now arriving, who come in companies of fifties or hundreds, not yet organized into regiments, and therefore having no surgeon with them. To such we feel that we can be of especial service.”

“ Aug. 12, p. m. ; at 6½ o'clock, thirty men arrive, belonging to the Wisconsin 5th, in charge of a sergeant. He left them immediately to go to headquarters to get wagons to transport them to their camp. They were men sent on from the hospital at Baltimore. They had no provision for supper. We supplied them, and at 9½ o'clock they were packed into the wagons which had arrived. Had I seen the sergeant beforehand, he would gladly have let them rest for the night in the reception-house. Meantime, at about 8 o'clock, thirteen men and one woman, of the Wisconsin 6th, arrived from Baltimore hospital, without any one in charge of them. They had been merely told to go to Washington, and join their regiment. We gave them supper, made them comfortable for the night, and after breakfast they were taken to their encampment.”

Dr. Grymes, the physician to the Home, in his report, dated October 10th, says:

“ I have professionally treated over 400 soldiers since the opening of the house—some of them very sick. I have sent 36 to the general hospitals from the Home, and others from the depôt. I have given medicine to many who were directed to call for advice. I have furnished medicines to various regimental surgeons arriving at the station-house; and, whenever the opportunity has occurred, have conversed and advised with them upon the prevailing diseases of our section of the country; and I have informed them what disposition they could make of their sick.”

Copies of reports of the inspector in charge of the agency are submitted herewith.

The general accumulation of troops around Washington has rendered this special establishment for their aid and comfort in the particulars above suggested, and in part stated, almost indispensable. Like services are everywhere rendered them, however, by the inspectors and other agents of the Commission, in every camp and military position, and the Commission hopes (should it be enabled to continue and extend its operation) to mitigate, at least in some degree, the hardships and sufferings to which raw troops under inexperienced officers are inevitably ex-

posed, by establishing or encouraging the establishment of similar agencies for their aid and comfort at all the great centres of military operation.

It has already done so at Baltimore, Cleveland, and Chicago, through its local agencies in these cities: the Secretary of the Treasury has authorized the use of the Marine Hospitals in the two latter towns for this humane object.

A single illustration is perhaps necessary, of the manner in which a few energetic and humane men, moving near the track of an army, may often chance to be able to mitigate the inevitable miseries of war by a moderate expenditure, when not hampered in making it by regard for the strict forms of action to which the regular agents of Government are confined. Such an illustration is found concisely stated in a report of Robert Collyer, who was employed, at the time of writing it, as an inspector of the commission in Missouri.

“Twenty-seven cases of fever had been embarked at Otterville, on Saturday morning, at 10 o'clock, in a box car. The men were laid in their blankets, on the floor. With the sick was laid the body of an officer, in a coffin. A single nurse, without stores, appliances, or money, could do little else than bring water to the sick. At California Station, in the middle of the same afternoon, they were stopped, to have the road open for the train carrying * * * * * For this object they waited until one o'clock a. m. of the following day, when the word came by telegraph that it would not pass during the night. They finally arrived at half-past three, of a raw morning, at Jefferson, where I fortunately came upon them,—two already dead on the floor; the rest faint and cold. I asked the nurse what he was doing for their breakfast. He answered that he had made a requisition, and hoped that he might get food upon it by ten o'clock. I immediately got a supply of tea, coffee, bread, and meat, from the nearest public houses, and brought it to them, for which they were very grateful.

“Finally they reached St. Louis at 10 o'clock on Sunday evening, having been thirty-six hours on the road. Three men had died in the transit; a fourth followed in a few hours,—4 of 27!”

A vast amount of extraneous aid, it may be here noticed has been rendered to the Government in the care of the sick among the troops in Missouri, of only a portion of which any record has been kept. Since August last, two inspectors of the Commission have been engaged in camp inspection at and near St. Louis, and at other points in Missouri, and have distributed to those wanting them a large aggregate of hospital supplies forwarded from Chicago, Detroit, Cleveland, and New York.

The "Western Sanitary Commission," constituted by General Fremont, about three months since, commenced the establishment in St. Louis of hospitals for the reception of such sick as might be transported thither from the columns advancing southwest and west. Latterly, their duties have largely increased, and in co-operation with the medical authorities of the army, they have provided most comfortable quarters for about 2,500 sick, their hospitals being nearly or quite full.

The provisions thus made have been inspected by a Secretary of the Commission, Dr. J. S. Newberry, and the evidence of intelligence, industry and philanthropy which they furnished, is in the highest degree gratifying.*

DISTRIBUTION OF ADVISORY DOCUMENTS.

The Commission, having enrolled among its associate members many distinguished members of the medical profession throughout

* The arduous gratuitous labors of the St. Louis Commission, in the establishment and care of their hospitals, have necessarily engrossed most of their time and attention; and the inspection of camps, and the prevention of disease among the troops west of the Mississippi, which, in their generous self-devotion, they assumed, has proved to be beyond their power. In these circumstances, it has been determined, by the parent Commission, to extend into Missouri the same thorough system of sanitary measures now being carried out through all the divisions of our army. An associate secretary has therefore been sent to St. Louis, who will, in co-operation with the Western Sanitary Commission, and with the assistance of experienced inspectors, in the shortest time possible, investigate fully the condition and wants of the troops in Missouri, and promptly supply all needed material aid.

the loyal States, has thought it fairly within the scope of its duties to invite them to aid in the protection of the army against disease, by the preparation of papers intended to embody in a brief compass the latest results of medical and surgical science, in regard to various special points of great practical importance, as to which some of our volunteer surgeons, necessarily inexperienced in their new field of army medicine, surgery, and hygiene, and without access to libraries, may need information and advice. The duty of compiling these papers has been confided by the Commission to leading members of the profession in our principal cities; and papers on re-vaccination, on the treatment of camp fever, on dysentery, and on certain surgical operations of importance, but not universally understood, are now completed or in progress. These the Commission proposes to print, and to place in the hands of every member of the medical staff. Though many of these gentlemen need no advice or instruction as to their professional duties, there are, doubtless, some whose patients will feel its benefit, and should a single life be thus saved, the labor will be abundantly recompensed.

RECORD OF BURIALS.

The Commission has endeavored to obtain information by which the place of burial of the volunteers who have been killed in battle, or who have died in hospitals, may be established. They have also elaborated a system of records for those dying in hospitals, and of indications of their burial place, by which their bodies may be identified; which has received approval, and been ordered to be carried out, blanks and tablets for the purpose being furnished to each regimental quartermaster.

DISBURSEMENTS.

The following is a statement of the cash disbursements of the Commission to the 20th November, 1851.

Travelling Expenses of Inspection.....	\$2,079 00
Compensation of Services for Inspection.....	3,480 36
Travelling Expenses of Commissioners.....	1,640 13
Office Expenses, Including Services.....	1,036 24
Printing and Stationery.....	1,823 95
Postage.....	397 19
Telegrams.....	90 29
Freight.....	888 66
Soldiers' Home, at Washington.....	1,195 00
General Hospital.....	2,392 74
Regimental Hospital.....	572 59
Store House Expenses at Washington.....	660 83
	<hr/>
	\$16,256 98
	<hr/> <hr/>

THE MEMBERS OF THE COMMISSION.

Of the gentlemen named as Commissioners, in your order dated June 9th, 1861, the following accepted the duty assigned them, and have continued active members of the Commission, viz:

The Rev. HENRY W. BELLOWS, D. D., New York.

Prof. A. D. BACHE, LL. D., Washington.

ELISHA HARRIS, M. D., New York.

GEORGE W. CULLUM, U. S. A., Washington.

ALEXANDER E. SHIRAS, U. S. A., “

ROBERT C. WOOD, M. D., U. S. A., “

WILLIAM H. VAN BUREN, M. D., New York.

WOLCOTT GIBBS, M. D., New York. *

SAMUEL G. HOWE, M. D., Boston.

CORNELIUS R. AGNEW, M. D., New York.

J. S. NEWBERRY, M. D., Cleveland.

The Commission, under your authority, has since added to its number by the addition of the following members, viz :

GEORGE T. STRONG, New York.

HORACE BINNEY, JR., Philadelphia.

The Right Rev. THOS. M. CLARK, D. D., Providence, R. I.

The Hon. JOSEPH HOLT, Kentucky.

R. W. BURNETT, Cincinnati.

The Hon. MARK SKINNER, Chicago.

FREDERICK LAW OLMSTED, New York.

It has also appointed about four hundred "associate members" from every part of the loyal States, including many gentlemen accomplished in sanitary science, whose counsel and assistance has been found of great value. Through these associate members, auxiliary organizations have been established in our principal cities, which have rendered material service to the Commission, in supplying it with funds, in stimulating the supply of hospital material, and in the preparation of medical and surgical papers.

An expression is due of the obligations which the Commission is under, to the Major-General Commanding; the Quartermaster General, and to the Medical Director of the Army of the Potomac, for valuable advice in its deliberations.

Thanks are due, also, to nearly all the agents of Government, who have at any time had it in their power to aid the work of the Commission. In the various regiments of volunteers which have been inspected, the number of officers from which the Com-

mission has received information is about seven thousand. With a single exception, they have answered enquiries and received suggestions, in matters of their duty, with entire courtesy and frankness. The fact illustrates a distinguishing characteristic of this Republican Army.

IMPORTANCE OF MILITARY HYGIENE.

The experience and observation of the last five months, has only strengthened the original conviction of the Commission, of the immense practical importance to the nation, in a merely economical point of view, of a thorough system of military hygiene, and of increased precautions against the occurrence of disease. Such precautions can hardly be said to form part of our present system. The army medical staff are charged with the cure of disease; its prevention forms a most subordinate branch of their duties, if, indeed, it be distinctly recognized as belonging to them.

The views of the Commission on this subject are clearly embodied in the following extracts from a Report on Army Medical Statistics presented to the British House of Commons, (printed June, 1861):

“Reports exhibiting the results of extensive observations over a wide field will serve to measure the influences of each known cause on health, and will probably lead to the discovery of new causes, both of impaired and of vigorous life. They will every year contain new contributions to the science of health, in which the whole nation is concerned. The report will be the means of improving the health of the army. They will contribute to diminish the army’s sickness, which is attended with expense as well as suffering; for a sick army is the worst extravagance in which a nation can indulge. Through the want of information, which these reports will supply, the exact amount of sickness in the army is not known; but according to past experience, it may be inferred that at least *thirteen thousand* officers and men of the

present force are habitually in the hospitals, so that to have an available strength of *one hundred and eighty-seven thousand*, the country has to maintain *two-hundred thousand* of all arms. The *thirteen thousand* sick men in the hospitals cost as much as *thirteen thousand* men under arms. Here is a wide margin for economy.

“If the statistical reports help the Secretary of State for war to reduce largely the sickness of the army in peace and in war, they will, it is plain, save thousands of pounds annually in the estimates. At the same time they will effect a still more important saving: for they will save the lives of our soldiers.

“If soldiers die in battle by hundreds, they die of disease in hospitals by thousands.

“The economy of life resulting directly from the information which statistical returns supply, has been already strikingly exemplified in Jamaica, where, by a better choice of stations and sanitary arrangements, the mortality has been reduced from 13 (in 1817–1836) to 6 per cent. per annum (in 1837–1855) on the strength.

“The sickness in the field may be reduced by carefully selecting men; by letting the men when it is practicable, breathe purer air; by selecting the healthiest sites available for camps; by raising the men in their tents from the ground; by supplying them with purer water; by better arrangements for cleanliness, clothing, and the supply of food, and by better medical arrangements.

“A certain amount of insalubrity will nevertheless remain.

“As we have shown that the excessive sickness of the army involves a large amount of expense, it is evident that the diminution of that sickness will effect a great saving in peace and an enormous saving in war. For sick men are not only a loss but an incumbrance to an army. Their numbers are negative quantities. The expense of recruiting and of invaliding soldiers would be reduced by reducing the rates of mortality. Fewer men would be required, and recruits would more readily join a healthy army. The existence of an army in the highest state of efficiency would give additional security to the country without increasing the cost; the liability to an attack would be lessened; war would be waged with more chances of success, and would sooner be brought to a close by such an army than by an army

suffering from diseases which have hitherto infested our barracks and camps."

The object had in view by the Commission can be effectually accomplished only by the direct action of Government, through officers who can order, where the Commission can only advise. The cause our armies have to defend is alone dearer to the people than are those who have to suffer in its defence. The strength and mobility of the army cannot be sacrificed to the care of its sick and wounded. The sick and wounded should be sacrificed unflinchingly, to every unavoidable, military necessity; but all the more should they be supplied with whatever mitigation of suffering military necessities leave possible. And these should be furnished them, not as if a hard master were driving a bargain with them—as in the commutation of a board contract—but as if the love and pity of mothers, wives, sweethearts, and sisters, were exercised with the far-seeing providence, boldness, ingenuity, tact and industry of true military generalship—Surgeon-Generalship.

The duty of guarding against the defeat of our armies by disease, needs to be undertaken as earnestly, as vigilantly, with as liberal a policy, and with as resolute a determination, as any other military duty.

To secure this result, the Commission is convinced that a higher place needs to be accorded the medical staff in the organization of the army. Its relations with all departments and all ranks, as well as with the Government itself, needs to be more intimate, confidential, and influential.

Whatever and whoever stands in the way of this, the Commission wants put out of the way. But if an impression prevails

in any quarter that the members of the Commission, in their devotion to this purpose, have been over-zealous, or sought, individually or collectively, to bring it about by action not absolutely within their assigned duty, or that they have used any indirect or unworthy means therefor, that impression is without the smallest foundation in truth. Whoever seeks to promulgate it, narrows to a personal issue a question of the broadest humanity, and is without provocation or excuse for so doing, in any action of the Commission.

The one point which controls the Commission is just this: a simple desire and resolute determination to secure for the men who have enlisted in this war that care which it is the will and the duty of the nation to give them. That care is their right, and, in the Government or out of it, it must be given them, let who will stand in the way.

The Commission has no fear that its motives will be misconstrued, or its words perverted. In the life-struggle of a nation, soft speaking of real dangers and over-considerateness is a crime.

Whether the great tide of the spirit of war which now submerges our land shall be allowed to quietly subside, or whether the struggle in which we are preparing to engage shall continue so long as to establish in us the habits of thought and of life of a military nation, matters little. It matters much that, whatever betide us, we remain true to the central idea of our nation's life; that our army be one with our people, and that we accept whatever the Almighty sets before us as our duty, courageously, patiently, and with mutual helpfulness.

The members of the Commission, deeply grateful for the honored confidence which has constituted it so important an artery

of the people's love to the people's army, desire nothing so much as that by a sufficient enlargement and invigoration of the proper departments, they may be relieved of the duties which they have undertaken.

While, however, their beloved Government can, with advantage, continue to accept such services as by the aid of the public liberality they are able to offer, they renew their assurances of the devoted good will with which they remain at its disposal.

By order of the Commission :

FRED. LAW OLMSTED,
General Secretary.

APPENDIX.

I.

OFFICERS OF THE SANITARY COMMISSION.

President, the Rev. H. W. BELLOWS, D. D.
Vice President, Prof. A. D. BACHE, LL. D.
Treasurer, GEO. T. STRONG.
General Secretary, FRED. LAW OLMSTED.
Associate Secretary, J. S. NEWBERRY, M. D.
" " J. FOSTER JENKINS, M. D.
" " J. H. DOUGLAS, M. D.
Assistant Secretary, A. J. BLOOR.

Actuary, E. B. ELLIOTT.
Accountant, JOHN BOWNE.

II.

STAFF OF INSPECTION.

ATLANTIC.

J. FOSTER JENKINS, M. D., *Associate Secretary*.
LEWIS H. STEINER, M. D., *Sanitary Inspector*.
GORDON WINSLOW, D. D., " "
GEO. L. ANDREW, M. D., " "
WM. M. CHAMBERLAIN, M. D., " "
GEORGE A. BLAKE, M. D., " "
ROBERT WARE, M. D., " "
HENRY K. OLIVER, M. D., " "

CENTRAL.

J. S. NEWBERRY, M. D., *Associate Secretary*.
GODFREY AIGNER, M. D., *Sanitary Inspector*.
C. S. GRISWOLD, M. D., " "
A. N. READ, M. D., " "
W. M. PRENTICE, M. D., " "

WEST OF THE MISSISSIPPI.

J. H. DOUGLAS, M. D., *Associate Secretary*.
Prof. HENRY A. WARRINER, M. D., *Sanitary Inspector*.

INSPECTORS ENGAGED IN SPECIAL DUTY.

FRED'K N. KNAPP,
HENRY B. ROGERS,
ROBERT COLLYER,
THOS. B. DEWALDEN,
J. B. CLARK,
W. S. WOOD.

III.

EXAMPLE.

Owing to the insignificant number of our regular army, and to the fact that a large part of it has been constantly engaged in scouting duties in the wilderness, the aspect of the tidy, well set-up, alert, thoroughly trained soldier, so familiar to all Europeans, is almost unknown to the native American. Of military administration, and especially of sanitary duties, our officers have rarely seen anything, even rarely read or heard anything, before they become responsible for executing them. Information about them is to be obtained from certain paragraphs of military brevity scattered among above sixteen hundred sections of the general *Regulations for the Army*, and from observation of those a little more advanced in experience. Hence the exceeding value of a good example in establishing a standard of attainment. It was precisely the same in the revolutionary war, and it was then, not until the Inspector General took a company of one hundred and twenty men, and by giving it his almost undivided personal attention for some time, personally inspecting each man twice a day, and was thus able to set before the Continental officers an example of real excellence, that the army began to assume an efficient character for offensive operations. "In a fortnight," writes Steuben, "my company knew perfectly how to bear arms, *had a military air*," &c. "I had my company of guards exactly as I wished them to be. They were well-dressed, their arms clean and in good order, and their general appearance quite respectable." * * "It afforded a new and agreeable sight for the young officers and soldiers." "Having gained my point, I dispersed my apostles, the inspectors, and my doctrine was eagerly embraced." This was in December, 1777—a year and-a-half after the war opened.

In the *Regulations* for the Continental army the police, sanitary, and administrative duties of officers are far more thoroughly defined than in the present *Regulations*, and, if they were regarded, the Continental army toward the close of the war, at least, must have had a much more creditable appearance than our present army, and been less in danger of camp epidemics. See *Kapp's Steuben*.

IV.

SOME NOTES OF AN INSPECTION OF A PART OF THE FORCES
ENGAGED IN THE BATTLE OF BULL RUN.

As soon as practicable after the battle of Bull's Run, a series of seventy-five enquiries was prepared, intended to elicit information as to the condition of the troops before, during, and after the engagement, and as to the defects in the mode of providing for the necessities of the army which had been manifested in the series of movements which were connected with it. These questions were placed in the hands of the seven inspectors of the Commission, who were then employed in visiting the regiments which had been engaged, for the purpose of ascertaining and administering to their wants, and they were instructed to obtain answers to them, which would represent as nearly as possible the knowledge and judgment of the most intelligent officers and surgeons of these regiments with whom they were able to confer.

The returns received comprise about two thousand items of evidence with reference to the history of the battle, and have a certain value otherwise than from a medical or sanitary point of view. The largest part of them were collected by physicians and examiners of life insurance companies, accustomed to an exact and searching method of inquiry.

Portions of each of the twelve brigades under the command of Major General McDowell, at the time of the general advance of July 16, were visited by the inspectors.

The entire number of bodies of troops visited was thirty.

Of the twelve brigades comprising the army of the Potomac, seven only crossed the stream known as Bull Run, on the occasion of the engagement of Sunday, July the 21st, and took any active part in the main action with the enemy.

Certain regiments that crossed the stream and took important part in the action of the 21st, (as, for instance, the 69th and the 71st New York State Militia,) were removed from Washington to be mustered out of service so soon after the battle, that no reports were obtained from them.

Concerning several of the regiments visited, replies were obtained to the entire series of seventy-five questions proposed; concerning others, replies were obtained to but a portion of the series—the defect being due in some instances to neglect on the part of inspectors, in others, to inability on the part of the regimental officers consulted to give the information desired.

Skirmish of the 18th.—Of twenty-nine bodies of soldiers visited, four were actively engaged in the “demonstration” of the 18th of July, (Thursday,) at Blackburn’s Ford, (across the Bull Run,) three others were engaged, but not actively, and twenty-two were not engaged.*

Engagement of the 21st.—Of the same twenty-nine bodies of troops, twenty were actively engaged in the battle of the 21st of July, (Sunday,) seven were engaged, but not actively, and two were not engaged.

Camp Guard.—The average number left as camp guard at the time of the general advance, previous to the engagements of the 18th and 21st, from each of nineteen regiments reporting on this point, was sixty-eight, (more exactly, 68.2.) From ten of the twenty-nine regiments visited, no report was made as to the number so left. The smallest number so left behind by any regiment was thirteen; the largest number so left, one hundred and fifty.

Strength of Regiments.—The average number of troops that marched for the battle field at the time of the general advance, from each of twenty regiments reporting on this point, was (as stated by their officers) eight hundred and two; † nine of the twenty-nine bodies of troops visited not reporting. The smallest number so marching was six hundred, the largest number nine hundred and fifty-one.

Last Meal.—The last meal before the battle of the 21st, of sixteen of the twenty-nine regiments, was on the evening of the day before; that is, on the evening of the 20th. Six regiments had a regular breakfast early (that is, before 2½ o’clock) on the morning of the day of the battle; two regiments breakfasted at six, and the battalion of United States infantry is reported to have enjoyed a regular meal in the woods about eleven a. m. The time of the last regular meal of three regiments is not reported, but there is reason for stating it to have been about 6 a. m.

First Movement on the 21st.—The troops, except those in the reserve, were aroused from sleep between the hours of one and two o’clock on the morning of the battle of July the 21st, the march being ordered to commence with some at two, with others at half-past two. ‡

* The thirtieth body, previously referred to, was Blenker’s Brigade, which also was not engaged and which is for the present disregarded, because the returns from it are more imperfect than the average.

† This is believed to be somewhat over estimated.

‡ Those regiments which breakfasted at six were of the reserve.

The Commissariat—The troops had been supplied at about 3 p. m., on the 16th of July, with three days' rations in their haversacks, "which should have lasted them to the afternoon of the 19th." [See report of Captain Clark, Commissary of Subsistence.] And again, in a circular from headquarters, dated at Centreville, July 20th, 1861, an equal distribution of the subsistence stores on hand was required to be immediately made to the different companies of each division. In accordance with the last-mentioned order, "100,000 complete rations were received by the army at and in the vicinity of Centreville—sufficient for its subsistence five days." (Hence there appears to have been a short interval unprovided for.)

According to the reports made to the inspectors, few companies complied fully with these orders; twenty-six of the twenty-nine regiments visited took at least a partial supply, say from one to three days' rations, under the former order; two regiments, it is said, taking "no supply," depending for food upon "forage." An insufficient supply in one case was accounted for by the statement that "they had no expectation of being called to march;" (that is, therefore did not obey the order.) In several instances it is stated that the supply of three days' rations taken by the troops was "exhausted before the close of the second day;" that is, the rations were wasted. These confessions of neglect or improvidence on the part of the volunteers are confirmed by the report of Commissary Clarke, in which it is stated that after the distribution had been properly made to the several divisions, he (Captain Clarke) knew "of several instances in which subsistence stores remained in possession of division and brigade commissaries, and of others in which provisions were left on the ground of the encampments on the morning of the 21st of July."

Distance Marched before the Battle.—The distance marched to the field of battle on the morning of the 21st by those who became actively engaged, varied from four to twelve miles; of those in the vicinity of the field but not actively engaged, the distance generally was from two to four miles, (Richardson's brigade remaining in the position it held on the 20th, menacing the enemy at Blackburn's Ford.)

Double-Quick.—The portion of this march to the battle field which was at double-quick, was, in the case of fifteen of the regiments, from one and one-half to three miles—generally from two and a half to three miles; in the case of thirteen of the regiments there was no portion of the march at double-quick. During the battle a few of the companies, and but a few, moved at double-quick for one or two miles.

It seemed to be generally considered by the volunteers that their strength was unnecessarily and injudiciously wasted by the extent of the double-quick advance. To a certain extent this appears to be true, yet the result could hardly have been affected by it if the men had been in tolerable condition.

Degree of Vigor at Commencement of Battle.—As to the physical condition of the troops on reaching the field of battle, it is reported that eight of the regiments visited were in "fair," "excellent," "good," "best" condition;

That in eight others "the men were somewhat exhausted," "partially exhausted," evidently suffering;"

That in twelve of the regiments visited, the troops were said to be "much exhausted," "generally fatigued," "many considerably exhausted;" in six of the regiments from one to twenty were "giving out," "giving completely out," &c., one or two instances of "sun stroke" being specified.

In eight regiments none "gave out" before the battle; in from nine to eleven regiments some gave out before the battle; and concerning the remaining regiments there is no report.

(There was was an evident disposition to regard the exhausted physical condition of the men as a chief cause of the defeat.)

Causes of Exhaustion before the Battle.—As to the causes assigned for the exhaustion, it appears that of the regiments visited, it was stated that three had not suffered at all from fatigue or heat, or want of food or drink or sleep; in seventeen of the regiments “fatigue” was assigned as a cause of exhaustion; in eleven the march at “double-quick” was specified as peculiarly fatiguing; in eight of the seventeen the exhaustion is attributed more to the double-quick than to want of food and drink; in sixteen of the regiments want of food was assigned as a cause of exhaustion; in eleven want of drink was assigned as a cause; and in a few cases, the exhaustion was attributed, in part at least, to want of sleep, and to a bivouac of three or four nights in the open air, with insufficient clothing, as was the case with the Fire Zouaves, who left their blankets and rubber cloths in camp.

So much as to the condition and movement of the troops before the battle.

Time in the Battle.—The time during which the troops taking part in the battle of the 21st were actively engaged (pushing forward the enemy, or being temporarily on retreat, after first coming under fire,) appears to have varied from twenty-five minutes to six hours, being in most cases from five to six hours.

To the regiments most actively engaged the time was thought to be much shorter than actually elapsed, the five or six hours in which they were engaged seeming to the men, as they state, scarcely one hour. The time during which men stood under fire without being actively engaged themselves is, on the other hand, found to be over-estimated by them.

Degree of Vigor during the Battle.—It is claimed that in eight of the twenty-nine regiments visited, there were no symptoms of exhaustion manifest during the battle; that in eight there was evident suffering and fatigue evinced by men lagging behind, and by companies breaking up, especially after double-quick, few or none giving completely out; that in ten regiments, many (in some instances stated as high as one-fourth or one-third of the number constituting the regiment,) gave completely out, “some few dropping down in convulsions,” or suffering from “sun stroke.” The evidences of exhaustion in other regiments are not assigned.

Causes of Exhaustion during the Battle.—In explanation of the alleged excessive exhaustion of the men toward the close of the battle, the officers consulted in twenty-six of the twenty-nine regiments referred to, attribute it to fatigue and heat, twenty-one to lack of food and drink. All the reports which assigned insufficiency of food and drink as a cause, also assigned excessive fatigue. Six of them assign fatigue, and especially the march at double-quick, as the main cause of the exhaustion which was manifest during and just after the battle.

Cause of Retreat.—The proximate cause of the retreat is variously assigned—to the attack of fresh reserves of the enemy upon our right—to the rapid and apparently wild return of the caissons for ammunition—to the appearance of a retreat of our cavalry, who were thought by some to be riding over our own infantry, the rear guard, at the same time, mistaking them for secession cavalry, &c. Certain more organic causes of the defeat are frequently stated.

By some the defeat is attributed to the condition of the men, exhausted by excessive fatigue, and by want of sufficient food, drink, and sleep; by others, to a “feeling,” on the approach of the fresh reserves of the enemy, “of the total inadequacy of a small force to compete with superior numbers supported by masked batteries.” By others the defeat is attributed to “causes involving the whole command;” “not due to previous exposure and fatigue, but to the bad conduct of the battle on the part of the leaders.” By others (regulars) the defeat is attributed to “inefficiency of volunteers;” by one (German) to “bad strategy and want of discipline.”

Through all the regiments there appears to have prevailed the false idea of the vast superiority in point of numbers possessed by the enemy, together with

a lack of confidence in the military skill of the leaders of the army of the Union, as compared with that of the leaders on the part of the rebels; also combined to a certain extent with a dread of meeting an invisible foe.

Officers Leaving their Commands.—In thirteen of the regiments the officers are said not to have been much separated from their commands, except in the case of wounded officers; in eleven regiments it appears that the officers were, to a considerable extent, separated from their commands, the regiments being "much scattered," "badly disorganized," "broken into fragments," the men being, in certain cases, "left entirely to themselves." Concerning five of the regiments visited, no information was given on this point. (The above report is that of the officers themselves in most cases.)

Throwing away of Arms and Equipments.—Of the twenty-nine bodies visited, twenty-two threw away or laid aside blankets and haversacks before engaging in battle. Some placed them in a pile under guard, others threw them aside carelessly, either before arriving on the field, while approaching it at double-quick, or immediately before engaging with the enemy. Three regiments threw off their blankets during the battle, and the march at double-quick on the battle field; one regiment threw aside blankets only, retaining haversacks; and three only of the twenty-nine bodies of troops visited retained possession of their blankets and haversacks during the engagement.

During the retreat, it appears from the reports of the inspectors that the men of ten regiments did not throw away any of their arms or accoutrements; that the men of nine regiments did throw away portions, no report being made relative to the course of the remaining ten regiments. There is no reason to believe that these latter averaged better in discipline than the former, and it is probable that there was some loss of arms in, at least, half of them. Colonel Keyes, of 1st brigade, 1st division, reports that his brigade bivouaced on the night of the 23d near Fort Corcoran, "every man with his firelock."

The number of muskets thrown away during the retreat was stated, in some cases, to be about fifty; generally the number is not mentioned. [A considerable portion of one regiment are reported to have exchanged their smooth-bore muskets for those of a superior kind left behind by regiments preceding.]

The blankets and haversacks of many of the regiments, especially of those actively engaged in the conflict of the 21st, were lost, being left on the field of battle wherever they were deposited before the engagement. A small number of the regiments, and a few individuals and companies in each regiment, possessed themselves again of their blankets and haversacks, it is stated, before leaving the field.

Overcoats do not appear to have been so generally lost, as many of the regiments left their camps at the time of the general advance, (July 16,) equipped in "light marching order," that is, with blankets, haversacks, and canteens, leaving overcoats in their camps. Certain of the regiments, as, for instance, the Connecticut regiments and the 2d Maine regiment, in the brigade under the efficient command of Col. Keyes, recovered much property of other regiments, including arms and other equipments thrown aside in flight, and also including the abandoned tents and camp equipage of two regiments, (of another brigade,) this latter property being secured by his troops during the continued drenching rain of the 22d. Companies in certain other regiments (as in the Massachusetts 1st) halted on retreat, and picked up blankets, camp kettles, &c., which they found thrown aside on the road. (The loss of blankets at this time led in certain regiments to a good deal of subsequent sickness and increased demoralization.)

Bad Arms.—One regiment complained of the bad condition of their smooth-bore muskets, (the altered muskets of 1840,) nipples breaking, cartridges too small, so as to drop in, or too large, so as to require to be forced in by pressing the ramrod against trees, &c., &c. This complaint does not seem to have been general, with certain regiments the smooth bores working efficiently.

Distance Travelled.—The distance traveled by the several regiments on the night of the retreat varied from twenty to thirty-five miles, generally it was about twenty-seven. The average distance of the day's advance and retreat, including movements on the field, was about forty-four miles.

Physical Condition after the Retreat.—The next morning, (the 22d,) according to the almost universal report, there were few, if any, able men in the infantry. Blistered feet, rheumatic pains, aching limbs, diarrhoea, and nervous debility being prevalent.

The physical condition of three of twenty-nine bodies of troops when visited a few days later, was reported "unaltered by exposure and retreat," "not exhausted;" the men of four regiments were reported to be not much exhausted; those of fifteen were reported to be much exhausted, "physically prostrated," "prostrated," "exhausted and worn out," "greatly affected by exposure and retreat," "terribly fatigued, could not get rested," &c. The physical condition of seven of the regiments was not stated.

Causes of Exhaustion.—The physical exhaustion of the troops was attributed to excessive fatigue, to heat, and to want of food and drink.

Extent and Degree of Demoralization after the Battle.—At the time of making the inquiries, from the 25th to the 31st of July, inclusive, it appeared that of the twenty-eight regiments visited, eight were considered by their officers not to be essentially demoralized;* one was described as "not discouraged," another "full of courage and ready for an engagement;" (1st Mass.) "morale good," (2d R. I.) "in good spirits," (2d N. H.)—eight were reported to be not much demoralized, "some few dispirited, but generally cheerful and animated," "somewhat depressed and disgusted with needless (?) exposure, otherwise not much demoralized," (there is reason to think that the exposure to rain, complained of as needless, was far from needless, was in fact, essential to the protection of property;) "not much disheartened" "will re-enlist," &c.; twelve were reported "as much demoralized," "much disheartened and discouraged," "morally prostrated by the rout," "low spirits," "one-half of the regiment demoralized, majority wish to go home," "wish to be disbanded and return to fight under other leaders," "completely demoralized, discontented, unwilling to serve, because, as they allege, ill-fed and unpaid."

The degree of demoralization does not appear to be coincident with the degree of physical and nervous exhaustion.

As a rule, the best officered, the best disciplined, and the best fed regiments, were obviously the least demoralized.

Causes of Demoralization.—The demoralization was attributed, by those making answer to the inquiry, generally, in each case, to several causes combined. Among these, in fifteen cases physical and nervous prostration was mentioned; in seven cases, discouragement on account of the result of the battle, accompanied sometimes with a feeling of inadequacy to compete with superior numbers; in two cases the great mortality attendant upon the late engagements was assigned among the causes; in three cases, dissatisfaction with armament—(smooth-bore muskets;) in three, dissatisfaction with and lack of confidence in officers; in five, dissatisfaction with food; in one case, dissatisfaction on account of failure to receive from Government pay promptly for services; in two dissatisfaction in consequence of supposed needless exposure to storm.

General Summary.—From these investigations, combined with information derived from official reports of the generals commanding; from published statements in rebel as well as loyal journals; from previous investigations of the

*Subsequent reports were sometimes less favorable.

inspectors of the Sanitary Commission as to the condition of the troops, and from other sources, it is manifest that our army, previous to and at the time of the engagement, was suffering from want of sufficient, regularly-provided, and suitable food, from thirst, from want (in certain cases) of refreshing sleep, and from the exhausting effects of a long, hot, and rapid march, the more exhausting because of the diminution of vital force of the troops due to the causes above enumerated. They entered the field of battle with no pretence of any but the most elementary and imperfect military organization, and, in respect of discipline, little better than a mob, which does not know its leaders. The majority of the officers had, three months before, known nothing more of their duties than the privates whom they should have been able to lead, instruct, and protect. Nor had they, in many cases, in the meantime, been gaining materially, for they had been generally permitted, and many had been disposed, to spend much time away from their men, in indolence or frivolous amusement, or dissipation.

It appears that many were much exhausted on reaching the field of battle, but that, supported by the excitement of the occasion, they rallied fairly, and gradually drove the opposing forces from Sudley Spring to the lower ford, and from the lower ford to beyond the Stone bridge and the Warrenton road; that, at this time, (half-past three,) when congratulated by superior officers, and congratulating themselves on having achieved a victory, and when having repulsed reinforcements sent from the extreme right of the enemy to support their retreating columns, they were just relaxing their severely-tried energies, there appeared in the distance "the residue" of the forces of General Johnston, (see McDowell's report, Dr. Nott's letter to a Mobile paper, and correspondence of Charleston Mercury,) a single brigade (Eusey's) coming from the Manassas Gap Junction railroad, marching at double-quick to engage our troops at the right who had been hotly fighting unrelieved by reserves during the day. This brigade, joined with the two regiments of Kershaw and Cash, "turned the tide of battle." (See in Richmond Dispatch, July 29, statement "of a distinguished officer who bore a conspicuous part on the field of battle on the 21st of July.")

Our troops, ignorant of the fact that they had been contending against and repulsing the combined forces of Beauregard and Johnston; and believing that this inconsiderable remnant of Johnston's forces which they now saw approaching to be his entire column: and feeling their inability, without rest or refreshment, to engage an additional force of fresh troops nearly equal in number to those with whom they had been contending during the day,—commenced a retreat, not very orderly, but quite as much so, at first, as had been the advance in which they had driven back the forces of the enemy. Their (nominal) leaders, who too often had followed them in battle, were, in many cases, not behind them on retreat.

As they retired, however, a sense of disintegration began to pervade their ranks; each ceased to rely on his comrade for support, and this tendency was augmented by the upturned wagons blocking the road, which served to completely break the imperfect columns.

The reports of the inspectors give no evidence that the panic infected the extreme left, or the reserves, to any sensible degree. It was uncontrollable only with a part of the troops on the extreme right, among whom it originated. Many at the centre and the left were surprised when the order came to retreat, and for a time considered it as merely an order to change position in view of a still further general advance. Some officers state that they "warmly remonstrated"—"too warmly, perhaps"—when they received the order to retire.*

*The history of the 2d Rhode Island Volunteers may be cited as an example of those to whom Bull Run was no disgrace. They were near the extreme *right* in the engagement. Their previous march had been as fatiguing as that of others; they were as badly off for food as others, having nothing but a few crackers to eat for more than thirty-six hours. They were the first to engage; were severely engaged, and as long as, or longer than, any others; they were badly cut up, losing their colonel and other officers, and sixteen per cent. of the ranks in killed. They stood firm under fire while the panic-stricken crowd swept by and through them, and until they received the order to

The returns of the inspectors are not conclusive on this point; but from the result of subsequent specific inquiries by Mr. Elliott and the Secretary, it can be stated with confidence that indications of terror or great fear were seen in but a comparatively very small part of the retreating force. Most trudged along, blindly following (as men do in any mob) those before them, but with reluctance, and earnest and constant expressions of dissatisfaction and indignation, while no inconsiderable number retained, through all the length of the privation and discomfort of their dreary return to Washington, astonishing cheerfulness and good humor, and were often heard joking at their own misfortunes, and ridiculing the inefficiency of their officers. The Germans of the reserve were frequently singing. None of the reserves were in the slightest degree affected by the panic, and their general expression with reference to the retreat was one of wonder and curiosity.

The reserve, nevertheless, suffered much from fatigue, and subsequently exhibited most decided demoralization.

V.

AMBULANCE.

It is well known that the means of transportation which regiments of different States have brought to the seat of war with them, provided by the care and forethought, and paid for by the pecuniary liberality of the State or district supplying these troops, have, on their arrival at Washington, been withdrawn from them, and turned into the common stock. To the corps d'armée, whose position, in the front of operations, renders them liable to the various contingencies of war, a very limited supply of means of transportation for the sick and wounded has been provided, far less in many cases than their original property. Since this report was prepared, the first important skirmish in the army of the Potomac for some months has occurred. In all previous engagements it is notorious that the ambulance arrangements have proved, to the last degree, inadequate, and imperfect. Many lives were lost at Ball's Bluff, for instance, in consequence of this, and more would have been, had not a volunteer surgeon, without authority, compelled men to assist him in his duties, by drawing his revolver and shooting at the first who refused to obey his orders. Since then the Medical Director has issued orders, excellent in spirit, for the training of a small number of ambulance attendants in each regiment, and it was hoped that we might be spared renewed occasion of shame for neglect to care for wounded men. In the affair at Drainsville, December 20th, Ord's brigade took to the field its whole ambulance provision, consisting of nine covered spring carts, in which but eighteen men could well be carried at once. The engagement took place twelve miles from where a "division hospital"—an anomaly in the service, unprovided for in the Regulations or Supply Tables—had been permitted to be established. Some sixty suffering men were got back to this hospital. But, although we had in this case driven the enemy in confusion from the field, for lack of ambulances, we were obliged to leave all but three of his wounded, (thought to be larger in number than our own,) on the ground where they fell, at the beginning of a December night.

retreat. They then wheeled steadily into column, and marched in good order, until the road was obstructed by overturned wagons. Here they were badly broken up by a cannonade, scattered and disorganized, but afterwards, having mainly collected at Centreville, reformed and marched the same night, under such of their officers as remained alive, to and through Washington to a position several miles to the northward—a post of danger—where they at once resumed regular camp duties. When visited by the inspector, a few days afterwards, he was told and was led to believe that the men had only wanted a day's rest to be ready and willing to advance again upon an enemy. He reported the regiment not demoralized.

VI.

VOLUNTEER ARMY SUPPLIES.

It is hardly just to let this report go forth to the public without a more distinct reference to the deep and earnest, resolute and abiding spirit of patriotism in the women of the country of which the Commission daily receives more tangible evidence than can be conveyed in words. From a backwoods neighborhood, for instance, comes a box containing contributions of bed clothing and wearing apparel from sixty women and children, the invoice running thus: "*One pair of stockings from the widow Barber; one quilt, two bottles currant wine, one cheese, Mrs. Barber; two pillow cases and one pair stockings, Jane Barber; one pair stockings and one handkerchief, Lucy Barber; one pair mittens and Robinson Crusoe, Jedediah Barber;*" and then follows the list of contributions of another family. A few devout words only are commonly added to such a list, but they imply that the donors are ready to give all they possess if it shall be needed to maintain the inheritance of our fathers. Blankets worn in the Revolution, and others taken in the last war with England, heir-loom linen, with great-grandmother's hand-marks, and many family treasures, are sent as free-will offerings, with simple prayers that they may contribute to the comfort of some defender of liberty. To the same end, the first ladies of the land, if any are entitled to that appellation, have, without cessation, during all the hot summer, been engaged daily in dry, hard, plodding work, sorting, marking, packing goods, and carrying on extended and tedious accounts and correspondence, with the precision, accuracy, and regularity of trained merchants. In all there is little character of romantic enthusiasm, but much, and, as the months pass, more and more, of deep-seated, abiding, self-sacrificing resolution. It seems as if the women were just now beginning to feel how much they love their country; and the inquiry "How can we best do something for the army?" is coming from every quarter, from the border slave States as well as the free. That it is important that this desire should be gratified, and with judicious economy directed where it will most truly aid, however slightly, the strength and comfort of our soldiers, there can be no question. Although our volunteers are, as compared with the soldiers of other armies, generously paid, few large armies of modern times have been as little influenced by mercenary motives. The gifts which, especially when sick and wounded, the men have sent to them from the women at home, can but have an ennobling influence upon them; and the aid given in this manner to the army, must create in all those from whom it proceeds, an interest in and sympathy with the army, and with its objects, which will prepare them constantly for greater sacrifices and more resolute devotion to the Government, should it be needed. How well Washington understood this, the following letter, written by his own hand at a time when he must have been overloaded with business of the grandest importance, gives evidence. It has never before been published:

Copy of a Letter from Gen. Washington to Mrs. Bache, (Daughter of Franklin.)

HEAD Q'RS IN BERGEN, N. J., 14th of July, 1780.

MADAM: I have received with much pleasure—but not till last night—your favor of the 4th, specifying the amount of the subscriptions already collected for the use of the American soldiery.

This fresh mark of the patriotism of the Ladies entitles them to the highest applause of their country. It is impossible for the army not to feel a superior gratitude on such an instance of goodness. If I am happy in having the concurrence of the Ladies, I would propose the purchasing of coarse linen, to be made into shirts, with the whole amount of their subscription. A shirt extraordinary to the soldier will be of more service to him than any other thing that could be procured him; while it is not intended to, nor shall, exclude him from the usual supply which he draws from the public.

This appears to me to be the best mode for its application, provided it is approved of by the Ladies. I am happy to find you have been good enough to give us a claim on your endeavors to complete the execution of the design. An example so laudable will certainly be nurtured, and must be productive of a favorable issue in the bosoms of the fair, in the sister States.

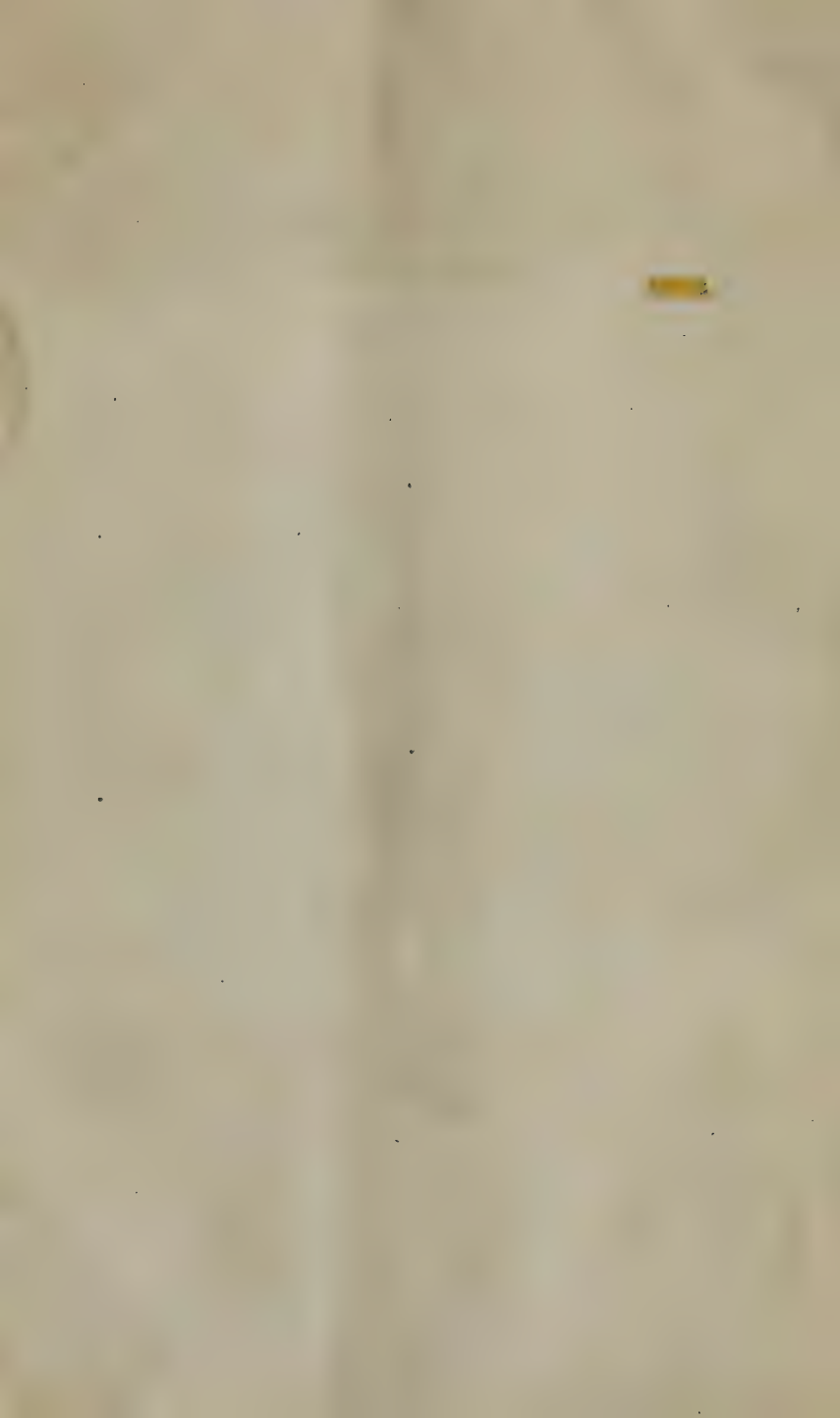
Let me congratulate our benefactors on the arrival of the French fleet off the harbor of Newport on the afternoon of the 10th. It is this moment announced, but without any particulars, as an interchange of signals had only taken place.

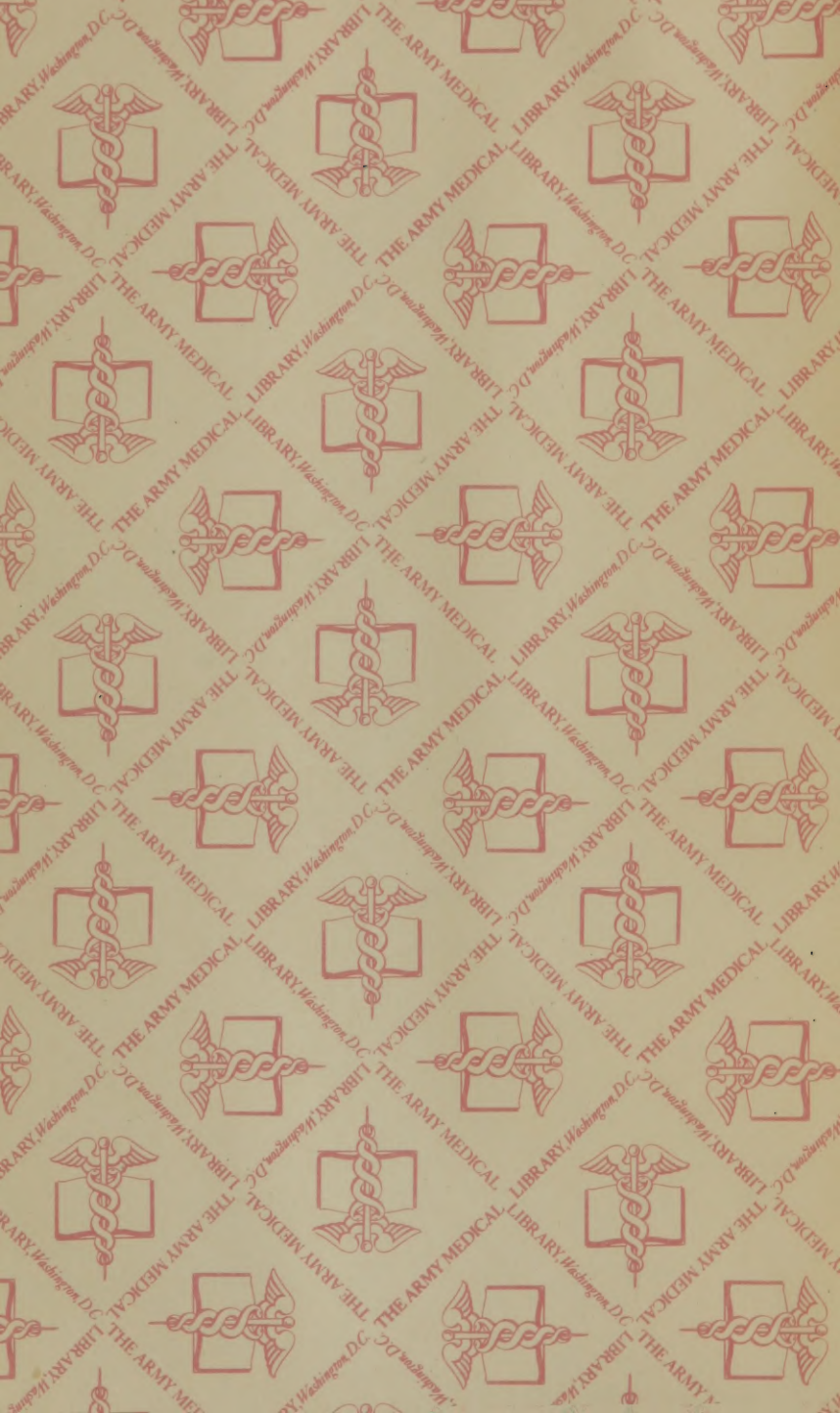
I pray the Ladies of your family to receive, with my compliments, my liveliest thanks for the interest they take in my favor.

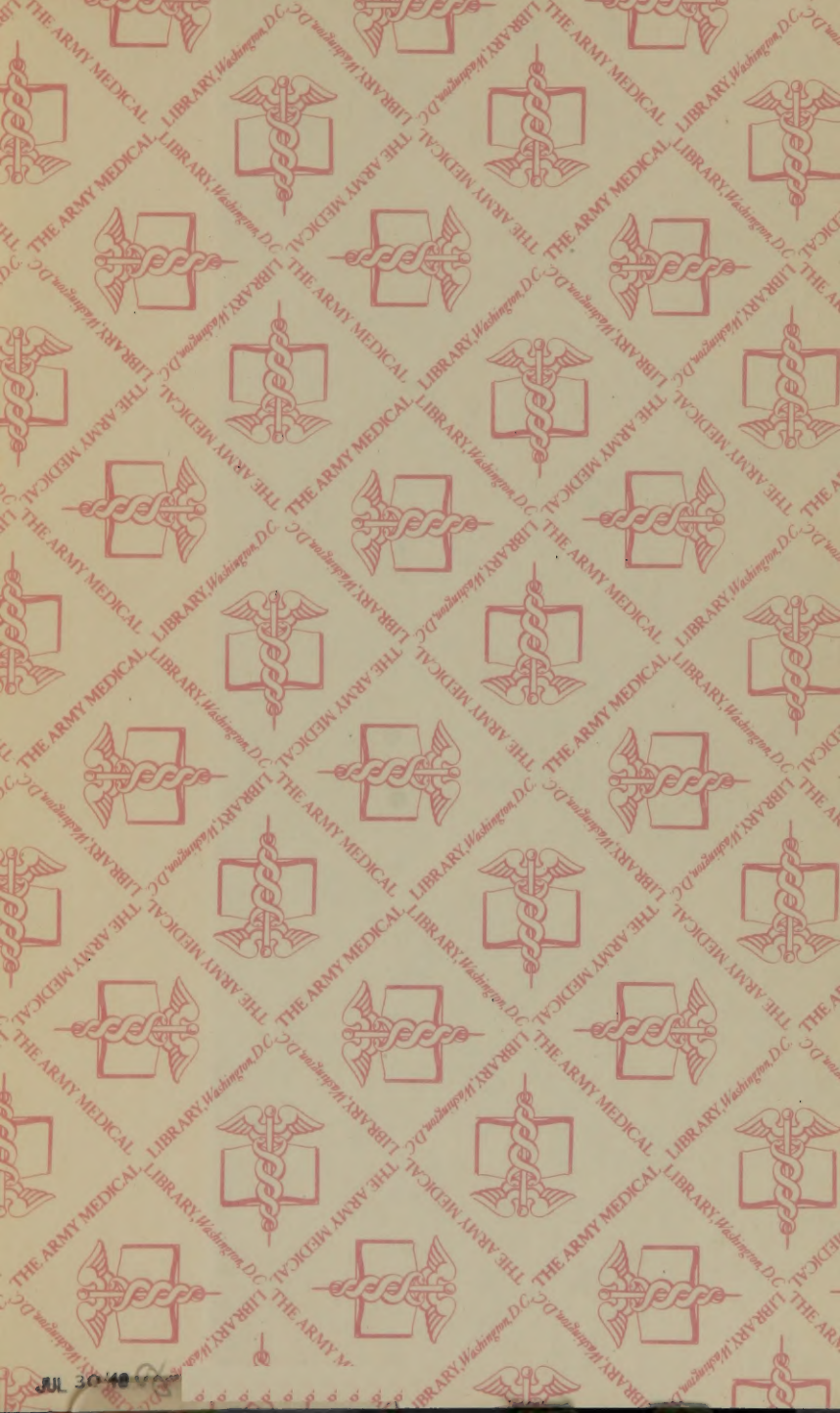
With the most perfect respect and esteem, I have the honor to be, madam,

Your obedient and humble servant,

GEO. WASHINGTON.







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