

under authority of which General Alvord, the Paymaster General, was appointed Brigadier General.

Brigadier General N. W. Brown succeeded Brigadier General Benjamin Alvord, as Paymaster General, upon the retirement of Brigadier General Alvord, 8 June, 1880.

Under the laws now in force, the organization of the Pay Department of the army is as follows:

One Paymaster General, with the rank of Brigadier General.

Two Assistant Paymasters General with the rank of Colonel.

Two Deputy Paymasters General, with the rank of Lieutenant Colonel.

Fifty Paymasters with the rank of Major.

Note.—For laws relative to organization of the Pay Department now in force, see Sections 1182 to 1194, inclusive, Revised Statutes, U. S., which went into operation 1 December, 1873, and the laws passed since that date, viz: Act of 2 March, 1875, 18 Stat., 338; Joint Resolution of 3 March, 1875, 18 Stat., 524; Act of 22 July, 1876, 19 Stat., 95.

MEDICAL DEPARTMENT.

The history of the Hospital Department of the army commences with the Siege of Boston, 1775, for the first legislative enactments of the Continental Congress only legalized what was already in existence, and gave a fixed organization to what the emergencies of occasion had called into being months before.

The Second Provincial Congress, of Massachusetts Bay, was at this time in session, and early foresaw the necessity that existed for action looking toward the proper care of the sick and wounded. With rare common sense, their first enactment provided for an examination of persons asking appointment as Surgeons, and on 8 May, 1775, they ordered:

“That the President *pro tempore*, Doctor Church, Doctor Taylor, Doctor Holten and Doctor Dansmore, be a committee to examine such persons as are or may be recommended for Surgeons of the army, now forming in this colony.” Doctors Baillies, Hall and Jones were subsequently added to the committee, and a proviso adopted that any three present should constitute a quorum.

Sixteen medical candidates presented themselves before this Board, and of this number six were rejected as “not qualified.” The subjects of the examination were Anatomy, Physiology, Surgery and Medicine.

After the Battle of Breed's Hill a hospital was established at Cambridge, and Doctor John Warren a brother and pupil of Doctor Joseph Warren, who fell while commanding the troops in that battle was placed in charge. He was soon after succeeded by Doctor Isaac Foster, of Cambridge, who was afterwards Deputy Director General.

About this time a Hospital was also established at Watertown, and another at Roxbury under the charge of Doctor Isaac Rand, and on 27 June a fourth, for the exclusive care of small-pox patients.

The Provincial Congress of Massachusetts exercised no supervision except over the troops from that province, while as time passed the forces from other States had assembled at Cambridge, and added to the aggregate of the army there formed, and the necessity that arose for a general medical, or as it was termed in the earliest legislative enactments, Hospital Department, and General Washington on 21 July, in a letter to the President of the Colonial Congress in session at Philadelphia, recommended the consideration of the Congress to the subject, but on 19 July Congress had anticipated this recommendation and appointed a committee consisting of Robert Treat Paine, of Massachusetts, Francis Lewis, of New York, and Henry Middleton, of South Carolina,

"to consider the method of establishing a Hospital," and they on 27 July reported a bill which was adopted creating a Hospital Department, and providing for the officers thereof.

Doctor Benjamin Church was elected Director General and Chief Physician, and resolved that Doctor Church have authority to appoint four Surgeons, and that the Surgeon's Mates be appointed by the Surgeons, not to exceed 20 in number

There had been much talk of the appointment of the illustrious Warren to the position of Director General, but he preferred the more hazardous life of an active command in the field, and accepting a Major General's commission was killed at Breed's Hill.

Next to Warren, Doctor Church was universally regarded as the proper man for the position. He was a native of Boston, and had long enjoyed an enviable reputation both of a professional and personal character, and was a member of the Provincial Congress of Massachusetts.

Doctor Church, however, did little or nothing to improve the efficiency of his Department, and numerous complaints were made to General Washington against him, and within three months of his appointment he was arrested on a traitorous correspondence with the enemy in Boston.

A Court of Inquiry was immediately ordered to investigate the circumstances, composed of the Commander-in-Chief, all the Majors and Brigadier Generals then on duty with the army, and Adjutant General Horatio Gates.

The following is the official record of its proceedings:

"At a council of war held at Headquarters, Cambridge, 3 October, 1775, present—

"His Excellency General Washington: Major Generals Ward, Lee, and Putnam: Brigadier Generals Spencer, Heath, Sullivan, Green, and Thomas: Adjutant General Gates.

"The General communicated to this Board, a discovery of a correspondence carried on with the enemy by Doctor Church, by letters in characters, which was deciphered by Rev. Mr. West, and laid the same letter before the members of the council.

"After considering and discussing the matter, it was determined to adjourn until tomorrow, and then that Doctor Church be examined.

"On 4 October, Council of War met: present as before, Doctor Church being sent for, and shown the letter in characters, was asked whether the said letter was written by him, to which he answered, he believed it was. He was shown the explanation of said letter as deciphered, and asked whether it was a true one, to which he answered in the affirmative. [The letter was addressed to Major Cane, in Boston, and contained a statement of the number and disposition of the American forces, assertions of his devotion to the cause of the Crown, and directions for continuing the correspondence.]

"Doctor Church then explained his intentions in writing said letter, as calculated to impress the enemy with a strong idea of our strength, and situation, in order to prevent an attack at a time when the Continental Army was in great want of ammunition, and in hopes of effecting the more speedy accommodation of the present dispute; and made solemn asseverations of his innocence.

"The General then asked the opinion of the Council severally, whether it did not appear that Doctor Church had carried on a criminal correspondence with the enemy; to which they unanimously answered in the affirmative. The question was then taken, and discussed what were the proper steps to be taken with respect to him, and after examining the articles of the Continental Army, and particularly the articles twenty-eight and fifty-one, it was determined from the enormity of the crime, and the very inadequate punishment, pointed out that it should be referred to the General Congress for their special direction, and that in the mean time he be closely confined, and no person visit him but by special direction."

The report of Washington to the President of Congress is as follows:

* * * * *

"I have now a painful though necessary duty to perform, respecting Doctor Church, the Director of the Hospital. About a week ago, Mr. Secretary Ward, of Providence, sent up one Wainwood, an inhabitant of Newport to me, with a letter directed to Major Cane, in Boston, in occult letters, which he said had been left with Wainwood some time ago by a woman who was kept by Doctor Church. She had before pressed Wainwood to take her to Captain Wallace, Mr. Dudley, the Collector, or George Rowe, which he declined.

"She then gave him the letter with strict injunctions to deliver it to either of those gentlemen. He, suspecting some improper correspondence, kept the letter, and after some time, opened it, but not being able to read it, laid it up, where it remained until he received an obscure letter from the woman, expressing an anxiety as to the original letter. He then communicated the whole matter to Mr. Ward, who sent him up with the papers to me. I immediately secured the woman, but for a long time she was proof against every threat and persuasion to discover the author. However, at length she was brought to a confession, and named Doctor Church, I then immediately secured him, and all his papers. Upon the first examination he readily acknowledged the letter, and said it was designed for his brother, etc. The army and country are exceedingly irritated."

The first action taken by Congress was to elect a new Director General, and on 17 October elected Doctor John Morgan, of Philadelphia, to fill the vacant place. On 7 November, they passed the following resolution:

"That Doctor Church be close confined in some secure jail, in the Colony of Connecticut, without use of pen, ink and paper, and that no person be allowed to converse with him except in the presence and hearing of a magistrate of the town, or the sheriff of the county where he shall be confined, and in the English language, until further orders from this or a future Congress."

In accordance with this resolution he was removed to the jail in Norwich, Connecticut. Previous to this action however, his case had come up before the Provincial Congress of Massachusetts. On 2 November he was arraigned before that body.

He made an eloquent speech in his defence, in which he attempted to vindicate himself from any design unfriendly to his country, but it was all in vain, and he was unanimously expelled as a member of the House.

Confinement in jail had an unfavorable effect upon his health, and in the following January, Congress so far released the rigor of his imprisonment as to permit him "to be removed to some more comfortable place of confinement than that where he now is, if such can be found in the colony, and that for the advancement of his health, the said Doctor Church be permitted to ride out at proper seasons, under a trusty guard, who will be careful to prevent his conveying any correspondence, or doing any act prejudicial to the safety and welfare of the United Colonies." On 13 May, 1776, his health still failing, he was permitted to go to Massachusetts and be set at liberty, on condition of his giving a bond for one thousand pounds to appear for trial when called upon, and his parole that he would indulge in no treasonable practices. Soon after his release he sailed from Boston to the West Indies, but the vessel in which he took passage was never heard from again.

Doctor John Morgan, the successor of Doctor Church, was a native of Pennsylvania, having been born in Philadelphia in 1735. He was a pupil of Doctor John Redman, and on the completion of his medical studies entered the army, and served as a Surgeon during the French War.

In 1760, he went to Europe and pursued his studies with John Hunter, obtaining the degree of Doctor of Medicine in 1764.

On his return in 1765, he found Shippen, the Bonds, and others engaged in founding a medical school in Philadelphia, and joining their enterprise, was elected to the chair of theory and practice of medicine. From this time until he re-entered the service, he was a leader among the literary and scientific men of that city, and he brought to his new position a cultured intellect, sound judgment in professional matters, and what was of the greatest value to the Continental cause, a ripe experience in military surgery, gained in early life in the struggles between the English and French for the possession of Canada. Doctor Morgan immediately after his appointment, proceeded to Cambridge and reported for duty, and at once re-organized the Hospital Department greatly to the advantage of the service.

The concentration of troops on the northern frontier caused the formation of a separate department, of which Major General Philip Schuyler was given command, and on 14 September, Congress appointed Doctor Stringer to be Director of the hospital, and Chief Physician in the Northern Department, with authority to appoint not exceeding four Surgeon's Mates as his assistants.

On 8 December, Congress authorized the appointment of Surgeons to the battalions then raising in Pennsylvania and New Jersey, and in the following March, when a

number of regiments had been raised, enacted that each regiment should also have a Surgeon's Mate.

The winter of 1775-76 was a very severe one to the army, both at Cambridge and on the Northern frontier. The latter were insufficiently clothed and fed, and lacked a well organized Medical Department; they were disheartened by their unsuccessful attack on Quebec, and the loss of their Commander, and unaccustomed to the hardships of a soldier's life, they felt severely the trials of a winter's campaign. From the time of their retreat from Quebec, until they were concentrated at Ticonderoga, they suffered great loss from the ravages of small-pox.

The soldiers were in the practice of inoculating themselves. This was forbidden in general orders, but failed to stop the custom, and among the victims of the disease was Major General Thomas, who had been sent from Cambridge to command the army after the death of Montgomery. Another disease, which though not fatal, caused much distress and unfitted a large portion of the army for duty, was nostalgia; which first made its appearance after the defeat at Quebec, and did not leave the army until the excitement of an anticipated attack from Burgoyne in 1777, roused the troops from the ennui into which they had fallen in their dull camp life at Ticonderoga.

The troops at Cambridge during the summer and fall of 1775, had suffered from small-pox, but otherwise, taking into consideration the unparalleled circumstances under which they were assembled, and general deficiency of all the comforts to which they had been accustomed, had been healthy. With the advent, however, of troops from the Middle and Southern States, typhus and typhoid fevers and dysenteries made their appearance, and the sick lists increased rapidly.

On 23 September, 1775, the aggregate present and absent of the army was 19,365; and of these, 1886 were reported as "present sick," and 931 "absent sick," a total of 2817 on sick report—a ratio of 145.4 per thousand of mean strength.

In December, the number taken sick each week varied between 676 and 1500; the larger portion of whom were treated in general hospital, and nearly one-third in the one at Roxbury, which was reserved for small-pox patients. The hospitals were destitute of everything that was needed to render the men comfortable. Few of the Surgeons had any instruments, medicines were very scarce, and such necessary articles as old linen for bandages and compresses, tape, thread, needles, adhesive plaster, blankets, sheets, pillows, &c., were almost entirely wanting. In this emergency, Doctor Morgan appealed to the charity and patriotism of the inhabitants of the towns in the vicinity, and with success, for on the 1st of January, he issued a circular addressed "to the publick," in which he details the interest with which the good people of Concord, Sudbury, Bedford, &c., had supplied his wants, and tenders them the hearty thanks of the Hospital Department, for their much needed relief.

The sick of the army on the 2nd of March, numbered 2398 present and 367 absent; total 2765, out of an aggregate strength of 18,524.

The British having evacuated Boston, and in view of the movement of the greater portion of the army from the vicinity thereof, and a transfer of the seat of war to the Middle States, the following instructions were issued to Doctor Morgan by General Washington.

"As the Grand Continental Army, immediately under the command of his Excellency, General Washington, will as soon as it is practicable, be assembled at New York, you are with all convenient speed, to remove the General Hospital to that city." * * *

"Reposing entire confidence in your care, diligence and zeal for the service, I remain satisfied of your best exertions for the public benefit.

"Given at Cambridge Headquarters, 3 April, 1776. GEORGE WASHINGTON."

About this time Congress passed an Act as follows:

"Resolved, That the number of Hospital Surgeons and Mates be increased, in proportion to the augmentation of the army, not exceeding one Surgeon and five Mates, to every 5000 men; to be reduced when the army is reduced, or when there is no further occasion for such a number."

The same enactment also increased the power of the Director General, by directing the several Directors of Hospitals and other subordinate officers, to make reports of expenses and returns of officers employed to him.

On 15 July, Congress elected Doctor William Shippen, of Philadelphia, to be Chief Physician to the flying camp of 10,000 men, which by a resolution of 6 June, they had established at Trenton, New Jersey. Previous to this, they had

elected Doctor Wm. Rickman, to be Director of the Continental Hospital, at Williamsburg, Virginia, and about the same time, Doctor Jonathan Potts, was appointed Surgeon in the Canada Department, (or at Lake George, as the General might direct,) with the understanding that the appointment was not to supersede Doctor Stringer.

The increase in the number of general hospitals, and some want of uniformity in the resolutions of Congress appointing these various directors, gave rise to controversies as to the official status of the Director General, and caused a bitter controversy between him and Doctor Stringer of the Northern Department, and that too at a time when the army was in the utmost distress, and upwards of 3000 men were on the sick report at Crown Point. The losses during and since the unfortunate campaign in Canada, from disease and desertion amounted to upwards of 5000 men.

Doctor Stringer reported to General Gates in a letter dated 24 July, 1776, that the men were literally dying for want of proper assistance and medical attendance. In one hospital at Fort George, the following was the return for the fortnight ending 26 July: admitted 1497; discharged 439; died 51; deserted 3.

Under these circumstances, a number of the officers, and Doctor Stringer among the rest, made application to the Director General for medicines; but he had received no official notice of either Dr. Stringer's or Doctor Potts' appointments, and was in doubt whether they could call upon him for assistance, and so wrote to Doctor Stringer.

However, he sent him medicines enough for six regimental chests, and also appointed surgeons and an apothecary for the Northern Hospital, on being informed of the absolute destitution they were in for medical officers.

This Dr. Stringer considered an infringement on his rights, and laid his complaints before Congress, and on 20 August, Congress resolved:

"That every director of a hospital, possess the exclusive right of appointing Surgeons and hospital officers of all kinds, agreeably to the resolutions of Congress of the 17th of July, in his own department, unless otherwise directed by Congress."

This for the time being settled the question in favor of the directors.

On 30 September, 1776, a resolution was passed which is of interest, being the first attempt on the part of Congress to legislate an enactment, which eventuated in the perfection of that system, which it may be truly said, has done more than anything else to maintain the high standard of the medical service of the army. The resolution was as follows:

"That it be recommended to the Legislatures of the United States, to appoint gentlemen in their respective States, skillful in physic and iurgery, to examine those who offer to serve as Surgeons or Surgeon's Mates in the army or navy; and that no Surgeon or Mate shall hereafter receive a commission or warrant to act as such in the army or navy, who shall not produce a certificate from some, or one of the examiners so to be appointed, to prove that he is qualified to execute the office.

During the latter part of the year 1776, a Congressional Committee had been investigating the affairs of every department of the army, and in consequence of their report, Congress on 9 January, 1777, passed a resolution:

"That Doctor John Morgan, Director General, and Doctor Samuel Stringer, Director of the Hospital in the Northern Department of the army of the United States, be, and they are hereby dismissed from any further service in said offices."

In regard to Doctor Stringer, it is much to be feared that the dismissal was but tardy justice for continual neglect of duty. General Gates had been very much dissatisfied with him for a long time, and had latterly confided everything to Doctor Jonathan Potts, who seems to have been an able and energetic officer. Doctor Stringer had, on 29 July, obtained permission to go to New York to procure the much needed supplies for the department, making at the same time a solemn promise to General Gates, that he would not delay an instant beyond what was absolutely necessary, in returning to his command, which was in very great distress for want of stores. Instead, however, of doing this he went on to Philadelphia, to discuss with members of Congress the disputed question of rank between Doctor Morgan and himself. He remained absent over two months, taking Boston en route back, during which time, as Doctor Potts writes, there was not enough lint or material for bandages in the whole army to dress the wounds of fifty men.

To the report of the committee, and the resolution dismissing Doctor Stringer, General Philip Schuyler, commanding the Northern Department, strongly objected in a letter to Congress.

Doctor Stringer was a warm and personal friend of General Schuyler's (from whom he had received his original appointment,) and the latter did not coincide with the strictures of General Gates on the conduct of the Director. His protest, however, only served to draw down the indignation of Congress upon himself, for on 15 March, 1777, they passed a series of resolutions censuring him in the severest manner for his interference, and placed it on record:

"That as Congress proceeded to the dismissal of Doctor Stringer, upon reasons satisfactory to themselves, General Schuyler ought to have known it to be his duty to have acquiesced therein.

"That the suggestion in Doctor Schuyler's letter that it was a compliment due to him to have been advised of the reasons of Doctor Stringer's dismissal, is highly derogatory to the honor of Congress, and that the President be directed to acquaint General Schuyler that it is expected that his letters for the future be written in a style more suitable, etc.

"That it is altogether improper and inconsistent with the dignity of Congress to interfere in disputes among the officers of the army, which ought to be settled, unless they can be otherwise accommodated, in a court martial agreeably to the rules of the army."

After the dismissal of Doctor Stringer, Doctor Potts became the senior medical officer in the Northern Department, and remained on duty as acting Director until the re-organization of the Hospital Department.

In considering the question of the dismissal of the Director General, it is a matter of gratification that we have the most positive proof that the dismissal was an unjust one, for while Doctor Morgan remained under the stigma of dismissal for upwards of a year afterwards, Congress, in answer to an elaborate memorial presented by him in his defence requesting an investigation into his conduct, on 18 September, 1778, referred the matter for investigation to a special committee, and on 12 June, 1779, the committee made their report, when the following preamble and resolutions were presented to Congress and unanimously passed:

"Whereas, By report of the Medical Committee, confirmed by Congress on 9 August, 1777, it appears that Doctor John Morgan, late Director General and Chief Physician of the General Hospital of the United States, had been removed from office on 9 January, 1777, by reason of the general complaint of persons of all ranks in the army, and the critical state of affairs at that time; and that the said Doctor John Morgan requesting an enquiry into his conduct, it was thought proper that a committee of Congress should be appointed for that purpose; and whereas, on the 18th day of September last, such committee was appointed, before whom the said Doctor John Morgan hath in the most satisfactory manner, vindicated his conduct in every respect as Director General and Physician in Chief, upon the testimony of the Commander-in-Chief, general officers, officers in the general Hospital Department and other officers in the army, showing that the said Director General did conduct himself ably and faithfully in the discharge of the duties of his office, therefore:

"Resolved, That Congress are satisfied with the conduct of Doctor John Morgan, while acting as Director General and Physician in Chief in the general hospitals in the United States; and that this resolution be published."

This was a very handsome apology for the wrong done, but even now they did not restore him to the army, and he retired to private life and died on 15 October, 1789, at the age of fifty-four years.

Among many striking characters furnished by our Revolutionary War, few are more admirable than that of John Morgan.

As a student he was laborious and painstaking; as a physician, learned far beyond most of his contemporaries; as a young surgeon in the British Army he acquired both knowledge and reputation.

"He was respected by the officers and beloved by the soldiers; and so great were his diligence and humanity in attending the sick and wounded who were the subjects of his care, that I well remember," says Benjamin Rush, "to have heard it said, that if it were possible for any man to merit honor by his good works, Doctor Morgan would deserve it for his faithful attendance upon his patients." He may be said to be the father of medical education in America, for while abroad he elaborated a plan for the institution of medical colleges in the colonies, and he sustained his views by an elegant and scholarly discourse on the subject at the commencement of the College of Phila-

delphia, on 31 May, 1765, and it was by his efforts, aided by Shippen and others, that the college was induced to establish a Medical Department.

When he had finally gone from it, the army found out how great a mind and true friend had been lost to its ranks; and all, from the Commander-in-Chief to the junior subaltern, united in their testimony before the Congressional Committee to relieve him from the aspersions cast upon his character by the malevolence of his enemies.

Congress made no appointment to fill the vacancy caused by the dismissal of Doctor Morgan, and in the interregnum that followed, Doctors William Shippen and John Cochran drew up a plan modelled on that of the British army, which they submitted to the Commander-in-Chief. Washington gave it his warm approval in a letter to the President of Congress, recommending it to the immediate consideration of Congress.

Congress in March, appointed a special committee, consisting of Oliver Wolcott, of Connecticut, Jonathan Witherspoon, of New Jersey, Samuel Adams, of Massachusetts, Daniel Roberdeau of Pennsylvania, and Abraham Clark, of New Jersey, to devise ways and means for preserving the health of the troops.

The report of this committee was made the subject of debate, and several times re-committed, until 2 April, when the former committee were discharged and a new one appointed, consisting of Messrs. Elbridge Gerry, John Adams, and Thomas Burke.

On 7 April, they reported a bill which was substantially Doctor Shippen's plan, and which, after debate, was passed.

It definitely fixed the status of the Director General, by making him really the executive head of the Department. It directed that returns from the various hospitals be made at frequent periods by the officers thereof to him, and placed the regimental medical officers under a supervising officer of their own corps.

The number of officers created by this Act was very large, and it entirely re-organized the Medical Department of the army.

On 11 April, Congress proceeded to the election of officers of the Medical Department, called for by the new organization.

To the position of Director General, Doctor Philip Turner, of Connecticut, was at first nominated and elected, but before adjournment a reconsideration was moved, and it was urged with great propriety that the author of the plan had claims, not only of great distinction in his profession, but of previous service, which were superior to those of the others. Accordingly, a new election being held, Doctor William Shippen received the unanimous vote of all the thirteen States.

The positions in the *Middle Department* were filled as follows:

Physician General of the Hospital, Doctor Walter Jones, of Virginia.

Surgeon General of the Hospital, Doctor Benjamin Rush, of Pennsylvania.

Physician and Surgeon General of the army, Doctor John Cochran, of Pennsylvania.

In the *Eastern Department* the appointments were:

Deputy Director General, Doctor Isaac Foster of Massachusetts.

Physician General of the Hospital, Doctor Ammi R. Cutler, of New Hampshire.

Surgeon General of the Hospital, Doctor Philip Turner, of Connecticut.

Physician and Surgeon General of the army, Doctor William Burnett, of New Jersey.

For the *Northern Department*:

Deputy Director General, Doctor Jonathan Potts, of Pennsylvania.

Physician General of the Hospital, Doctor Malachi Treat, of New York.

Surgeon General of the Hospital, Doctor Forgue.

Physician and Surgeon General of the army, Doctor John Bartlett.

Doctor William Shippen, Junior, the successor of Doctor Morgan, as Director General, was the son of a distinguished physician of Philadelphia, where he was born in 1736.

His father was one of the founders of, and a trustee in the College of New Jersey, at Princeton, and thither he sent his son to receive his academic education. He graduated with the highest honors in 1754, and after studying medicine for three years in his father's office, he went to Europe to take his degree.

In London, he resided in the family of John Hunter, and studied anatomy under his direction, and also studied under William Hunter.

From London he went to Edinburg, and placed himself under the tutelage of Cullen, graduating in 1761. Returning to America in 1762, he immediately commenced a course of lectures on anatomy in Philadelphia.

On the establishment of the Medical School in the College of Philadelphia, he was chosen to take the chair of anatomy, which he occupied until the war caused a suspension of the college in 1776, as before stated he entered the service of the United States, as Director of the flying camp established at Trenton, New Jersey, and was subsequently given the entire supervision over all hospitals on the west bank of the Hudson River.

Doctor Walter Jones, the Physician General of the Hospital in the Middle Department, was a native of Northampton County, Virginia. He received his medical education at Edinburg, enjoying the especial esteem of Cullen, and graduated in 1770.

He remained in the army but two months, and resigned to resume his practice in Virginia, and was succeeded by Doctor Benjamin Rush.

Doctor Benjamin Rush, Surgeon General of the Hospital in the Middle Department, was born near Philadelphia, 24 December, 1745.

He graduated at Princeton in 1760, when but fifteen years old, and then studied medicine for six years with Doctor John Redman, attending during this time the first course of anatomical lectures given by Shippen. He went to Edinburg, in 1766, where he received the degree of Doctor of Medicine in 1768. After spending a year in the London and Paris hospitals, he returned to Philadelphia in 1769, and in the same year was elected Professor of Chemistry in the Medical School. He represented Pennsylvania in the Colonial Congress of 1776, and was one of the signers of the Declaration of Independence. His reputation as a patriot, author, teacher and physician is too well known to need more than a passing mention in this place. As already stated he was soon transferred to the office of Physician General.

Doctor John Cochran, Physician and Surgeon General of the army in the Middle Department, was a native of Pennsylvania, born in Chester County in 1730, and at an early age studied medicine in a physician's office in Lancaster.

During the French War he served in the army in the position of Surgeon's Mate in the Hospital Department.

Washington had a high appreciation of his character, and it was chiefly owing to his recommendation that he received his appointment.

Writing to the President of Congress early in April, 1777, he says:

"If the appointments in the hospital are not filled up before the receipt of this, I would take the liberty of mentioning a gentleman whom I think highly deserving of notice, not only on account of his abilities, but for the very great assistance which he has afforded in the course of this winter, merely in the nature of a volunteer.

"The gentleman is Doctor John Cochran, well-known to all the faculty, and particularly to Doctor Shippen, who I suppose has mentioned him among the candidates.

"The place for which the Doctor is well fitted, and which would be most agreeable to him, is Surgeon General of the Middle Department. In this line he served all the last war in the British service, and has distinguished himself this winter, particularly in his attention to the small-pox patients, who but for him and Doctor Bond must have suffered much, if not been totally neglected, as there were no other medical gentlemen to be found. If the appointment of Surgeon General is filled up, that of Deputy Director in the Middle Department would be acceptable."

Doctor Isaac Foster, Deputy Director General in the Eastern Department was a Physician of high standing in the village of Charlestown, Massachusetts, where the Siege of Boston commenced, and had served in the army since the Siege of Boston.

Doctor Ammi R. Cutler, Physician General of the Hospital of the Eastern Department, was a native of North Yarmouth, Maine, and born in 1734. He graduated at Harvard in 1752, and studied medicine in the office of a Physician in Portsmouth, New Hampshire, and served as a Surgeon in the frontier army against the Indians in 1755. In 1758, he served as a Surgeon of the New Hampshire troops at the Siege of Louisburg.

Doctor Philip Turner, the Surgeon General of the Eastern Department, was born in Norwich, Connecticut, 1740. He studied medicine at the age of nineteen, was appointed Assistant Surgeon to a provincial regiment under General Amhorst, at Ticonderoga. He remained in the service until 1763.

He re-entered military life as soon as the war broke out, and was the first Surgeon of the Connecticut troops at the Siege of Boston.

Doctor Shippen said of him, that neither in America nor Europe had he ever seen an operator that excelled him. He is reported to have been successful in eighteen out of twenty operations of lithotomy.

As before stated his great fame gained him the appointment of Director General in the re-organization, but motives of policy induced Congress to vote a reconsideration, and the position was given to Doctor Shippen.

Doctor William Burnet, Physician and Surgeon General of the army in the Eastern Department, was born at Elizabeth, New Jersey, in 1730. He graduated in 1745, at the College of New Jersey, then located at Newark.

Doctor Jonathan Potts, Deputy Director General of the Northern Department, was a native of Pennsylvania, and graduated as a Bachelor of Physic at the College of Philadelphia, in 1768, when he delivered the valedictory address. He received the degree of Doctor of Medicine in 1771. Congress thought so well of his service as to pass a resolution specially commending him, on 5 November of this year.

Doctor Malachi Treat, was a distinguished practitioner in New York City, and originally entered the army under the appointment of the Provincial Congress of his native State.

He had been for a long time one of the board of examiners for admission of candidates in the Hospital Department from New York.

Doctor John Bartlett and Doctor Forgue, seems to have been entirely unknown.

Doctor William Brown was elected by Congress to the vacancy caused by Rush's promotion. He was a native of Maryland, and was educated in medicine at the University of Edinburg, where he received his degree in 1768.

Up to this time he had been in extensive practice at Alexandria, Virginia.

On 30 January, 1778, Doctor Rush resigned his commission as Physician General of the Hospital in the Middle Department, and was succeeded by Doctor William Brown.

After Washington became President he appointed him Director of the Mint in Philadelphia, an office which he held for fourteen years. He died on 14 April, 1813, aged sixty-eight years.

Doctor Charles McKnight was, on 21 February, 1778, elected to fill the vacancy caused by the promotion of Doctor Brown, and on 7 March, Doctor Cutler resigned.

In June, 1779, Doctor John Morgan, who had himself just been acquitted by Congress, preferred charges of malpractice against Doctor Shippen.

A court martial, ordered by Congress, honorably acquitted Dr. Shippen of every charge, and Congress approved the finding of the Court, and ordered Doctor Shippen's release.

On 21 January, 1780, Doctor William Brown resigned.

On 30 September, 1780, the Medical Department was again re-organized. The election of officers under the new law took place on 6 October.

William Shippen, Jr., was re-elected Director, and John Cochran was appointed Chief Physician and Surgeon in the army. The following were appointed chief hospital Physicians: James Craik, Malachi Treat and Charles McKnight. The other appointments were as follows: Purveyor, Thomas Bond; Assistant Purveyor, Isaac Ledyard; Apothecary, Andrew Craigie; Hospital Physicians and Surgeons, James Tilton, Samuel Adams, David Townshend, Henry Latimer, Francis Hagan, Philip Turner, William Burnet, John Warren, Moses Scott, David Jackson, Bodo Otto, Moses Bloomfield, William Eustis, George Draper, Barnabas Binney; and Surgeon to the regiment of invalids, Matthew Mans.

General Washington in a letter written to a member of Congress, dated 9 September, 1780, recommended the retention of Doctors Cochran, Craik, Latimer, Tilton, Hagan, Townshend, Jenifer, Craigie, as having a just claim to be continued in the service.

Doctor Thomas Bond belonged to a family illustrious in the annals of medicine in Philadelphia. His father was one of the founders of the college and hospital. Doctor Bond had seen continuous service with the army.

Doctor John Warren was born at Roxbury, Massachusetts, in 1753. He graduated at Harvard College in 1771, and studied medicine in the office of his brother, Doctor Joseph Warren. He settled in practice in Salem. When the war broke out, he entered the service as Surgeon to the Salem regiment of Massachusetts militia, marched with them to Lexington, and attended those wounded in that fight. After the Battle of Breed's Hill, he was appointed Hospital Surgeon in the army, and remained on duty as

such throughout the Siege of Boston, and until after the campaign in New Jersey. In 1777, he was placed in charge of the Hospitals in Boston and vicinity, a position which he retained until the close of the war.

Samuel Adams was a son of the distinguished Governor, Samuel Adams, of Massachusetts, and was born in Boston in 1751. He was educated at Harvard College, where he graduated in 1770. He studied medicine in Joseph Warren's office, in company with John Warren, David Townshend and William Eustis, and was admitted to practice in 1774. He was one of the earliest to enter the service, attending to the wounded at Lexington and Concord. Subsequently he was in charge of a general Hospital at Danbury, and remained in service throughout the war.

David Townshend was a fellow-student of the preceding, and like him, had been continuously with the army from the commencement of hostilities. He had performed efficient service in charge of Hospitals in the Northern Department, and during the campaign which ended with the surrender of Burgoyne.

William Eustis was born in Boston, in 1753. He graduated at Harvard in 1772, with the highest honors, and until the commencement of the Revolution, was a favorite student of Doctor Joseph Warren, who thought so highly of his abilities, that he secured him the appointment of Surgeon to the Massachusetts Artillery Regiment. He was appointed Hospital Surgeon after the removal of the army to New York, and had been continuously on duty ever since.

James Craik was a native of Scotland, who came to this country and entered the British army, soon after the completion of his education. He accompanied Washington soon after in an expedition against the French and Indians in 1754. At the time of receiving this present appointment he was in Rhode Island, conferring with Count Rochambeau, as to the establishment of Hospitals for the recently arrived French forces.

Bodo Otto was from Prussia, and received the degree of Bachelor of Physic in the College at Philadelphia, in 1771.

Moses Bloomfield was a native of Woodbridge, New Jersey, born in 1729. He had been for thirty years a practitioner of medicine in his native village, and been a member of the Provincial Congress of New Jersey.

On 3 January, 1781, three months after his re-election, William Shippen resigned the office of Director, and was succeeded by John Cochran.

The place lately held by Doctor Cochran, was filled on 3 March, by the promotion of James Craik, and that of Craik by the promotion of William Burnet.

Some time during the year 1780, Congress had provided that all officers who served to the close of the war, should be entitled to half pay for life. By some oversight this provision only extended to officers of the line, but on 3 January, 1781, Congress passed a resolution extending the privileges of half pay to medical officers on the following basis, viz:

Director, half pay of a Lieutenant Colonel; Chief Physician and Surgeons of the army, and all other officers, except Mates, the half pay of a Captain.

On 22 March, Congress extended the provisions of the Act, re-organizing the Medical Department, so as to include the South.

The officers elected under this Act, were Deputy Director, Doctor David Olyphant; Deputy Purveyor, Doctor N. Brownson; Chief Physician of the Hospital, Doctor Peter Fayssoux; Chief Physician of the army, Doctor James Brown; Hospital Physicians, Doctors Robert Johnson and William Reed.

On 20 September, chiefly through the exertion of Doctor James Tilton, Congress adopted an Act, providing for promotion by seniority in the Medical Corps.

Congress, after this, passed several Acts regulating the rank and allowance of medical officers. The last Act passed during the revolutionary period, relating to the Medical Department, was passed 1 January, 1783, and fixed the pay and subsistence of medical officers as follows

Director; one hundred and two dollars pay per month, and sixty dollars subsistence.

Deputy Director and Physician, each, one hundred dollars pay, and forty-eight dollars subsistence.

Surgeons, each ninety dollars pay, and forty dollars subsistence.

Apothecary and Purveyors, each ninety-two dollars pay, and thirty-two dollars subsistence.

Deputy Apothecary and Deputy Purveyors, each, fifty-nine dollars pay, and sixteen dollars subsistence.

Mates, each, forty-two dollars pay, and twelve dollars subsistence.

The surrender of the army under Cornwallis had now taken place, and Congress resolved on 22 March, 1783, that in lieu of the half pay for life, allowed by the resolution of 21 October, 1780, the veterans shall be entitled to five years full pay on discharge, or an equivalent in securities, with interest at six per cent.

The officers of the Hospital Department were permitted collectively to refuse or accept this offer.

The reduction of the army took place rapidly in 1783, and on 26 September, the Commander-in-Chief was authorized to grant furloughs to such of the medical staff whose services were no longer necessary. This was equivalent to a practical disbandment of the Hospital Department.

On 2 June, 1784, Congress, after an animated debate adopted the following resolution:

"That the commanding officer be, and he is hereby directed to discharge the troops now in the service of the United States, except twenty-five privates to guard the stores at Fort Pitt, and fifty-five to guard the stores at West Point and other magazines, with a proportionate number of officers, no officer to remain in service above the rank of Captain, and those privates to be retained who were enlisted on the best terms; provided Congress before its recess shall not take other measures respecting the disposition of those troops."

Before closing this division of the subject, the duty remains of tracing the career of some of the distinguished men who held important positions in the corps, and who, by their energy and fidelity under the most discouraging circumstances, had contributed to the cause of American Independence, as much though in a less brilliant way, as those who fought its battles.

Of some of those who occupied prominent positions, we are without any information; of others, the subsequent career was so distinguished as to form part of the history of the country.

John Cochran, Director of the army, after his discharge from the service, removed to the city of New York, and pursued the practice of his profession; when Washington became President, he appointed him Commissioner of Loans for the State of New York, which office he held for some years, when a stroke of paralysis put an end to his usefulness, and he retired to Palatine, Montgomery County, New York, where he passed the decline of his life. He died on 6 April, 1807.

James Craik settled in practice at Port Tobacco, Maryland, but soon after at the urgent request of General Washington, he removed to the neighborhood of Mount Vernon. In 1798, when war was threatened with France, he was appointed Physician General to the army, but held the position but a very short time, returning to Mount Vernon, where he was soon called on to attend the death-bed of Washington. He died on 6 February, 1814.

William Eustis returned to Boston and commenced practice, but abandoned it again in 1787, to serve as surgeon of a regiment of militia, raised to defend the frontier against the Indians.

He then resumed practice to leave it for the third time, as Surgeon to the forces employed in the suppression of Sharp's Rebellion. He then went into political life, and in 1800, was elected to Congress from Massachusetts. In 1809, he was appointed in the Cabinet of President Madison, as Secretary of War, an office which he held until after the surrender of Hull. In 1815, he went abroad as Minister to Holland, and on his return was re-elected to Congress for four sessions, when he succeeded Governor Brooks in the executive chair of Massachusetts. He died in 1825.

John Warren settled in Boston, and rose to the highest eminence in his profession. He became the most celebrated surgeon in New England, and was the first Professor of Anatomy and Surgery in the Harvard Medical College. He died on 4 April, 1815.

Philip Turner practiced in Norwich, Connecticut, until 1800, when he removed to New York City. Soon after this he was re-appointed in the army as a Staff Surgeon, and was permanently stationed in New York Harbor until his death, which took place in 1815.

James Tilton occupies an important place in our history as the Physician General of the army, in the War of 1812-15.

Of the subsequent career of the rest of the Surgeons of the Revolutionary Army, but little can be said. Malachi Treat practiced in New York, and fell a victim to his devotion to his duty, as Health Officer of the port, dying of yellow fever in one of the epidemics in that city.

David Townshend lived to a great age in Boston honored by all.

The remainder passed from public view with their withdrawal from the army, and we hear no more of them. Of the few who composed the corps at its re-organization in 1780, we have seen that a considerable number rose to high distinction either in professional or political life; it is not to be wondered at, that the lives of some should have been unrecorded, passed as they doubtless were in the quiet routine of medical practice.

It has seemed proper to sketch fully the origin of the Medical Department. Its history from the close of the Revolutionary War to 1861, it will only be possible to give an outline of, and as the official history of each of its officers is given in the body of the work, it is unnecessary to refer to them in detail.

The Act of 2 June, 1784, partially left the United States without an army. From 1784 to 1789, there was no Medical Department recognized by the Government, and what medical officers were required were employed by the States furnishing troops for use in guarding western posts.

On 29 September, 1789, the first Congress of the United States, in session at New York, enacted that a corps of 700 rank and file should be organized. Richard Allison, of Pennsylvania was appointed Surgeon of this corps. From this time up to 1798, medical officers were appointed for regiments as they were authorized by Congress.

In 1798, war being imminent with France, Congress authorized a large increase in the military forces of the country, and provided for the appointment of a Physician General, and at the earnest request of General Washington, James Craik, of Virginia, was selected.

In 1800, it became a matter of certainty that there would be no war, and Congress passed a bill directing the discharge of nearly all troops raised for the increase of the army. Doctor Craik was mustered out together with all medical officers, except six Surgeons and twelve Surgeon's Mates.

In 1812, Congress passed an Act authorizing an additional military force, which was necessitated by the war with Great Britain, and Doctor James Tilton, of Delaware, was appointed Physician and Surgeon General, and Francis Le Barron, of Massachusetts, was appointed Apothecary General, and the Medical Corps was largely increased.

During the War of 1812 the Medical Corps of the army performed faithful and efficient service, as the records of the Department amply show.

In March, 1815, the army was reduced and a large proportion of the medical officers who had performed faithful service throughout the war, retired to private practice, among them was Doctor Tilton, who carried with him into his retirement, the admiration and good will of all his subordinates in the Medical Department, and the respect of his superiors in the War Department.

In 1818, Congress passed a bill re-organizing the General Staff of the army, and many changes were made in the Medical Department, Hospital Surgeon, Joseph Lovell, was appointed Surgeon General.

The passage of the Act of 14 April, 1818, has generally been considered as the commencement of the modern history of the Medical Corps. This is true to the extent, that from that date, by the appointment of a Surgeon General, and the assumption of direct authority over the officers by that official, a great change was made in the responsibility of the Medical Staff, in their accountability for public property, and in the collection and preservation of the records pertaining to their duties. Nevertheless the organization of the Department was not essentially different from what it had been for many years before, the only material change being the consolidation of the hospital and garrison medical officers under the denomination of Post Surgeons. It was not until the reduction of the army in 1821, that the corps assumed the form which it has retained without decided alteration to the present time. It has therefore been thought better to close the history of the Department under the old *regime*, with the general reduction of the army in 1821, and the abrogation of regimental medical officers. This event will be considered more in detail hereafter.

It will be proper before doing so, to give a brief statement from such information as is now attainable, of the expenses of the medical Department previous to this period, as a comparison of those with subsequent years will be of value in estimating in one respect the relative efficiency of the different organizations. Under the establishment of 1802, the average appropriation for the Medical Department was \$13,500 per annum, or about \$4.00 per man, for every soldier in service. With the increase of the army in 1808, the expenses arose to \$50,000 per annum, or about \$5.00 per man. Of the cost of the Department during the war, no reliable figures have been found, but in the years 1816-18, under the military peace establishment of 1815, the appropriations averaged \$95,382 per annum, or about \$7.00 per man, while after the re-organization of the staff in 1818, they were reduced to \$39,104 per annum, or only about \$3.00 for each soldier in service. Commenting on this great variation in the expense of this branch of the staff, Surgeon General Lovell remarks (Letter to the Secretary of War, 28 November, 1822.)

"In explanation of this great difference in expense, it may be proper to add that a perfect system of responsibility for all public property, from the period of its purchase to that of its expenditure, has been established in this office; that the returns of the Surgeons of every article, are regularly rendered and examined, and full receipts required in the case of every transfer before their accounts are settled. This, with the plan of purchasing adopted, and of paying all bills without advancing money, absolutely precludes the possibility of fraud, extravagance or undue expenditure. It may also be remarked, that during the last four years, our military hospitals have been regularly and abundantly furnished with every article of furniture, medicine, stores, etc., necessary for the comfort, convenience and recovery of the sick, to which, as well as to the skill and attention of the Surgeons, the quarterly reports bear ample testimony."

Doctor Lovell, served as Surgeon General, to 4 June, 1836, and during his term of office many changes occurred in the Medical Department. He died 17 October, 1836.

Throughout his official career he had gained the universal respect, admiration and affection of all with whom he associated. He was succeeded as Surgeon General, by Surgeon Thomas Lawson, who served as Surgeon General during the War with Mexico, and up to the commencement of the rebellion, and the experience gained by the Medical Department during the period of his occupancy of the office of Surgeon General, was sure to be of value in the conflict in which they were called on to participate, and the prestige gained by the corps in the past, gave favorable augury for success in the future.

The time has not yet arrived to write an impartial history of the Rebellion, either in its political or personal aspects. The events are too recent and too many of the prominent actors therein still living to render it possible to give in detail every circumstance connected even with the comparatively uneventful record of the services of the Medical Corps, without trenching on matters which might give rise to controversy, and hence be foreign to the object of this sketch. Enough will be written to show that the Medical Department maintained its high standard of efficiency, gaining new laurels in every campaign and possessing at the close of the war the admiration of the profession throughout the world. The details of hospital construction and management, the conduct of field ambulance service, the record of the vast variety of wounds and injuries treated and of the immense number of camp diseases which came under the observation of the medical officers; these and kindred topics have been entrusted to the abler hands who are engaged in writing the "Medical and Surgical History of the War," and hence anything more than a passing reference to them is rendered unnecessary in these pages.

On 1 January, 1861, the Medical Corps consisted of one Surgeon General, thirty surgeons and eighty-three assistant surgeons. Of these, three surgeons and twenty-one assistant surgeons resigned to take part in the rebellion, and three assistant surgeons were dismissed for disloyalty. Five surgeons and eight assistant surgeons, natives of, or appointed from the States which took part in the rebellion, remained true to the flag. Considering the universal disaffection which prevailed throughout the service, and the strong pressure brought to bear on every man of southern birth in the army, these figures are exceedingly creditable to the Corps.

Very soon after the attack on Fort Sumter, and while troops were hurrying from all parts of the country to the defence of the Capital, the Surgeon General, whose long experience and military proclivities would have rendered his services invaluable in the

critical aspect of affairs, was compelled to leave the office where he had labored so faithfully for thirty-four years, and retire for his health to Norfolk, Virginia. In that place on 15 May, 1861, he was seized with a stroke of apoplexy and died in a few hours. He was the last of that gallant band of medical officers who had upheld the credit of the Corps under such difficult circumstances during the arduous campaigns of the second war with England. He had seen continuous service for forty-eight years, and had wielded his vigorous pen in the office of Surgeon General ever since the death of the lamented Lovell. Whatever may have been the judgment of his contemporaries on other points, no one denied him the possession of an extraordinary vigor of intellect, an industry which did not fail with advancing years, an ardent love for the military profession, and a high sense of the value of his Corps to the army; the determination to secure to it every right which his judgment thought just, and to weed out from it every member whom he considered to reflect no credit on its history. These traits of character brought him frequently in collision both with his superiors in the War Office and his subordinates in the army, but he was dismayed neither by authority nor influence in the prosecution of a favorite design or the establishment of a cherished plan. Consequently, while the energy of his character, the sincerity of his purpose and the ability of his administration caused him to be officially respected, he possessed none of those traits which had endeared Lovell to the entire army, and lacked that personal magnetism which obtains for those in high position the confidence and love of their subordinates. He was thoroughly conversant, from long service in camp and garrison, with all the details of a medical officer's duties, was a skilful surgeon and experienced hygienist, and in the long war waged by the Medical Corps for their rights of rank in the army was perhaps the fittest man to lead them to final success. The Medical Staff can well forget his defects, in recalling the great services he rendered in the long series of years during which he filled the position of Surgeon General.

On receipt of official information of his death the War Department issued the following order:

"WAR DEPARTMENT,

"ADJUTANT GENERAL'S OFFICE,

Washington, May 20, 1861.

"GENERAL ORDERS, No. 23.

"It is with pain that the Secretary of War announces to the service the loss of a distinguished veteran officer, the late Surgeon General THOMAS LAWSON of the army, who died at Norfolk, Virginia, on the 15th instant.

"Having in 1811 resigned from the navy, where he had served two years, Dr. Lawson passed immediately into the army—a service with which, from that time, he has been uninterruptedly connected. Full of a military fire, which not even the frosts of age could quench, and of a zeal for the honor of his profession which made his administration of the Medical Department a model of inflexibility, efficiency and economy, he never spared himself, and was always prompt to volunteer his services wherever they might be required.

"Thus, after having gone with credit through the war of 1812–15, he was one of the first to hasten with General Gaines to the relief of our forces in Florida; and having been placed at the head of a regiment of volunteers by the suffrages of the gallant Louisianians who composed it, he acquitted himself with much credit in this new sphere of duty, and proved himself an able and effective colonel.

"In fact, so marked were the military traits of his character, and among these, especially, his personal intrepidity, that at the close of the Mexican war, he was rewarded for his services in it by a brevet of Brigadier General in the army.

"As an appropriate tribute of respect to his memory there will be fired at every military post, on the day after the receipt of this order, eleven minute guns, commencing at meridian—and the national flag will be displayed at half-mast from the same hour until sunset of the same day; and for thirty days the prescribed badge of mourning will be worn by the officers of the army.

"By Order,

L. THOMAS,

"Adjutant General."

During the absence of General Lawson from Washington, Surgeon Robert C. Wood performed the duties of Surgeon General, and immediately after his death, Surgeon CLEMENT A. FINLEY, the senior surgeon in the army, was appointed to fill the vacancy,

The new Surgeon General was a native of Ohio, from which State he was appointed surgeon's mate of the first infantry in 1818. He was retained as assistant surgeon on the re-organization in 1821, and promoted surgeon in July, 1832. At the time of his promotion he was president of a medical examining board, which convened in New York city on the first of May. The other officers composing the detail were Surgeons McDougall and Sloan. The approach of war and prospective increase of the Corps caused the number of applicants for appointment to be much greater than usual. One hundred and fifty-six received invitations to present themselves before the board, of whom one hundred and sixteen appeared. The services of the new officers being much needed in the field, it was considered advisable that they should be appointed as soon as possible, and the board was consequently directed to arrange the successful candidates in three classes in the order in which they were examined. Of the first class, embracing those examined up to 25 May, three were rejected for physical disability, three voluntarily withdrew before the completion of their examinations, and twenty-two received a favorable report. Of the second class, embracing all examined up to 1 July, seven were rejected for physical disability, seventeen withdrew, seven were rejected for defective professional acquirements, and twenty-nine were recommended for appointment. The third class included those examined up to the final adjournment on 14 August. Eight failed to pass examination, nine withdrew their names, and eleven were accepted, making in all sixty-two approved candidates.

A board for the examination of brigade surgeons met in Washington in August, and was composed of Surgeons McLaren, Holden, Ten Broeck and White. It examined one hundred and thirty candidates for the position of surgeon of brigade, of whom one hundred and ten were approved. Thirty-seven candidates for the regular Medical Staff also appeared before this board, of whom twenty-four were found qualified for appointment.

The first troops brought into the field at the commencement of the war consisted, as will be remembered, of the three months militia called for by the President's proclamation, issued soon after the attack on Fort Sumter. These brought with them their own medical officers, and the only active service seen by them was at the battles of Big Bethel and Bull Run, Virginia, where, considering their lack of experience in military surgery, many of them rendered efficient service. Several were captured by the enemy while attending to the wounded of the latter fight. On 3 May the President issued a second proclamation calling for an additional force of forty regiments for two years service, to be apportioned among the various States. To each of these regiments one assistant surgeon was allowed to be appointed by the Governor of the State furnishing the troops, but only after examination by a properly authorized board, to be appointed in like manner. Soon after this organization was altered so as to provide for one surgeon and one assistant surgeon to each regiment. In the matter of appointment of these officers, the clause requiring them to be examined was not rigidly executed, and so many received appointments on personal grounds who proved incompetent, that it was found necessary, at the request of the Surgeon General, to issue an order authorizing Medical Directors to summon any medical officer reported as unfit from any reason for his position before a board of examination, and any who failed to receive a favorable report from this board were ordered to be dropped from the rolls of the army. This order had a most excellent effect, and in the regiments raised in accordance with the Act of Congress of 22 July, in which the same organization was maintained, a much more efficient class of medical officers was obtained. By the President's proclamation of 3 May the force called for was organized into divisions, to each of which was allowed a surgeon to act as Medical Director; but after the passage of the Act of Congress just mentioned this organization was abandoned, and a corps of brigade surgeons provided for, who were to be appointed by the President, by and with the advice and consent of the Senate.

The number of medical officers in the regular army being evidently insufficient, Congress on 3 August passed an Act for the "Better organization of the military establishment," of which the following are extracts:

"SECTION 2. *And be it further enacted*, That the President be and is hereby authorized to appoint by and with the advice and consent of the Senate, in addition to the number authorized by existing laws, and in accordance with existing regulations,
* * * * ten surgeons and twenty assistant surgeons, to have the pay, rank

and allowances, and perform the duties of similar officers in the present military establishment.

* * * * *

"SECTION 5. *And be it further enacted*, That there be added to the Medical Staff of the army a corps of medical cadets, whose duty it shall be to act as dressers in the general hospitals and as ambulance attendants in the field, under the direction and control of the medical officers alone. They shall have the same rank and pay as the military cadets at West Point. Their number shall be regulated by the exigencies of the service, at no time to exceed fifty. It shall be composed of young men of liberal education, students of medicine, between the ages of eighteen and twenty-three, who have been reading medicine for two years and have attended at least one course of lectures in a medical college. They shall enlist for one year and be subject to the rules and articles of war. On the fifteenth day of their last month of service, the near approach of their discharge shall be reported to the Surgeon General, in order if desired, that they may be relieved by another detail of applicants.

"SECTION 6. *And be it further enacted*, That in general or permanent hospitals female nurses may be substituted for soldiers, when in the opinion of the Surgeon General or medical officer in charge it is expedient to do so; the number of female nurses to be indicated by the Surgeon General or surgeon in charge of the hospital. The nurse so employed to receive forty cents a day and one ration in kind or by commutation, in lieu of all emoluments except transportation in kind.

* * * * *

"SECTION 17. *And be it further enacted*, That the Secretary of War, under the direction and approval of the President of the United States, shall, from time to time, as occasion may require, assemble a board of not more than nine nor less than five commissioned officers, two-fifths of whom shall be of the Medical Staff; the board, except those taken from the Medical Staff, to be composed as far as may be of their seniors in rank, to determine the facts and nature and occasion of the disability of such officers as appear disabled to perform military service, * * * * *

Provided, always, That the members of the board shall in every case be sworn to an honest and impartial discharge of their duties, and that no officer of the army shall be retired either partially or wholly from the service without having had a fair and full hearing before the board if upon due summons he shall demand it."

In the House of Representatives a bill was passed on the thirteenth of July, providing that boards for the retirement of disabled officers should be composed entirely of medical officers; but as the Senate a few days subsequently passed the bill above quoted, no action was ever taken on the House bill by that body, and it was enacted that retiring boards should be composed two-fifths of officers of the Medical Staff.

In his annual report to the Secretary of War for the year 1861, Surgeon General Finley thus speaks of the corps of medical cadets brought into service by the Act of 3 August, 1861:

"They have been found to be of great service in the field and in the hospitals, increasing the efficiency of the Medical Department by an intelligent assistance, and gleaning for themselves an amount of knowledge impossible to be obtained in the study of their profession in civil life, except at the cost of the labor of years.

"As no provision was made by the Act for the subsistence of medical cadets, it is therefore respectfully recommended that they be allowed one ration for each per diem. There is also no allowance for camp and garrison equipage made for their accommodation in the field. They should have the same as is now allowed subalterns in the army. It is respectfully recommended that this deficiency be supplied.

"In view of the advantage derived from the employment of this body of young men, and the increased comfort that is afforded by their means to the sick and wounded of our brave army, it is respectfully recommended that fifty more cadets be added to the corps, to be appointed in the same manner, and to enjoy the same privileges and emoluments as those already in service."

Other recommendations made by the Surgeon General in this report were: an addition of one assistant surgeon to each regiment of volunteers; an increase of the regular Medical Staff by ten surgeons and thirty assistant surgeons; the enlistment of civilians as nurses in the general hospitals, and the addition to the organization of each company of two men to attend the sick in the field under orders of the regimental surgeon. He also called the attention of the Secretary to "the inequality in

rank in proportion to the services and exposures that obtains in the Medical Corps of the regular army, compared with other branches of the General Staff."

On 7 February, 1862, Mr. Wilson, chairman of the Military Committee of the Senate, introduced a bill "To increase the efficiency of the Medical Department of the Army." The provisions of this bill effecting decided changes in the organization of the Medical Corps, gave rise to much discussion in both Houses of Congress. After being amended in many particulars, it finally became a law on 16 April, in the following form:

"*Be it enacted, etc.*, That there shall be added to the present Medical Corps of the army ten surgeons and ten assistant surgeons, to be promoted and appointed under existing laws: twenty medical cadets and as many hospital stewards as the Surgeon General may consider necessary for the public service, and that their pay and that of all hospital stewards in the volunteer as well as in the regular service shall be thirty dollars per month, to be computed from the passage of this Act. And all medical cadets in the service, shall, in addition to their pay, receive one ration per day, either in kind or commutation.

"SECTION 2. *And be it further enacted*, That the Surgeon General to be appointed under this Act shall have the rank, pay and emoluments of a Brigadier General. There shall be one Assistant Surgeon General and one Medical Inspector General of Hospitals, each with the rank, pay and emoluments of a Colonel of cavalry, and the Medical Inspector General shall have, under direction of the Surgeon General, the supervision of all that relates to the sanitary condition of the army, whether in transports, quarters or camps, and of the hygiene, police, discipline and efficiency of field and general hospitals, under such regulations as may hereafter be established.

"SECTION 3. *And be it further enacted*, That there shall be eight Medical Inspectors, with the rank, pay and emoluments each of a Lieutenant Colonel of cavalry, and who shall be charged with the duty of inspecting the sanitary condition of transports, quarters and camps, of field and general hospitals, and who shall report to the Medical Inspector General, under such regulations as may be hereafter established, all circumstances relating to the sanitary condition and wants of troops and of hospitals, and to the skill, efficiency and good conduct of the officers and attendants connected with the Medical Department.

"SECTION 4. *And be it further enacted*, That the Surgeon General, the Assistant Surgeon General, Medical Inspector General, and Medical Inspectors shall, immediately after the passage of this Act, be appointed by the President, by and with the advice and consent of the Senate, by selection from the Medical Corps of the army, or from the surgeons in the volunteer service, without regard to their rank when so selected, but with sole regard to qualifications.

"SECTION 5. *And be it further enacted*, That Medical Purveyors shall be charged under the direction of the Surgeon General, with the selection and purchase of all medical supplies, including new standard preparations, and of all books, instruments, hospital stores, furniture and other articles required for the sick and wounded of the army. In all cases of emergency, they may provide such additional accommodations for the sick and wounded of the army, and may transport such medical supplies as circumstance may render necessary, under such regulations as may hereafter be established, and shall make prompt and immediate issues upon all special requisitions made upon them under such circumstances by medical officers; and the special requisitions shall consist simply of a list of the articles required, the qualities required, dated and signed by the medical officer requiring them.

"SECTION 6. *And be it further enacted*, That whenever the Inspector General or any one of the Medical Inspectors, shall report an officer of the Medical Corps as disqualified, by age or otherwise, for promotion to a higher grade, or unfitted for the performance of his professional duties, he shall be reported by the Surgeon General, for examination, to a Medical Board as provided by the seventeenth section of the Act approved August third, eighteen hundred and sixty-one.

"SECTION 7. *And be it further enacted*, That the provisions of this Act shall continue and be in force during the existence of the present Rebellion and no longer: *Provided, however*, That when this Act shall expire, all officers who shall have been promoted from the Medical Staff of the army under this Act shall retain their respective rank in the army, with such promotion as they would have been entitled to."

It was proposed in the course of discussion on this bill to give the chief of the Medical Bureau the title of Director General, and also to appoint a Medical Purveyor

with the rank, pay and emoluments of a Lieutenant Colonel of cavalry, but both these propositions were voted down in committee. The day before the passage of this Act, Surgeon General Finley was retired from active services on his own application after forty years service, under the fifteenth section of the Act of Congress, approved 3 August, 1861. On 25 April, Assistant Surgeon WILLIAM A. HAMMOND was promoted to the vacancy, with the rank, pay and emoluments of a Brigadier General. Surgeon Robert C. Wood was appointed Assistant Surgeon General, and Brigade Surgeon Thomas F. Perley, Medical Inspector General, each with the rank, pay and emoluments of a Colonel. The following officers were appointed medical inspectors, with the rank, pay and emoluments of Lieutenant Colonel: Surgeons John M. Cuyler, Richard H. Coolidge, Charles C. Keeney and Edward P. Vollum of the regular corps; Brigade Surgeons George H. Lyman, William H. Mussey and George T. Allen, and Surgeon Lewis Humphreys, of the twenty-ninth Indiana volunteers.

Very soon after his appointment Surgeon General Hammond saw the great advantage that would accrue to the cause of scientific medicine and surgery by rendering the enormous experience of the war available for future study. Hardly ever in the history of the world had such an opportunity been offered for the collection of statistics upon all points of military medicine, surgery and hygiene, and of obtaining specimens illustrative of pathological anatomy. It was therefore determined to commence such a collection in Washington, and the initiatory steps were taken by the promulgation of the following circular:

“CIRCULAR, No. 2. “SURGEON GENERAL'S OFFICE,
Washington, D. C., 21 May, 1862.
“In the monthly report of sick and wounded the following details will be briefly mentioned in accompanying remarks:

SURGERY.

“*Fractures*—The date of reception, the situation, character, direction, treatment and result in all cases.

“*Gunshot wounds*—The date of reception, the situation, direction and character, the foreign matters extracted (if any,) and the result in all cases.

“*Amputations*—The period and nature of the injury, the character of the operation, the time, place, and result.

“*Excisions*—All operations for, with a statement of the injury demanding them, the date of injury, the date of operation, the joint or bone operated upon, and the result.

MEDICINE.

“*Fevers*—Their character and symptoms, an outline of the plan of treatment found most efficient, with remarks on the location and sanitary condition of camps or quarters, during the prevalence of these disorders.

“*Diarrhœa and Dysentery*—Grade and treatment, with remarks on the character of the ration, and the modes of cooking.

“*Scorbutic diseases*—Character and symptoms with observations on causation; and a statement of the means employed to procure exemption.

“*Respiratory diseases*—Symptoms, severity and treatment, with remarks on the sheltering of the troops, and the atmospheric conditions.

“Similar remarks on other preventable diseases.

“Important cases of every kind should be reported in full. Where *post mortem* examinations have been made, accounts of the pathological results should be carefully prepared.

“As it is proposed to establish in Washington an *Army Medical Museum*, medical officers are directed diligently to collect and to forward to the Office of the Surgeon General, all specimens of morbid anatomy, surgical or medical, which may be regarded as valuable; together with projectiles and foreign bodies removed, and such other matters as may prove of interest in the study of military medicine or surgery.

“These objects should be accompanied by short explanatory notes. Each specimen in the collection will have appended the name of the medical officer by whom it was prepared.

“WILLIAM A. HAMMOND, *Surgeon General.*”

The original organization of the Volunteer medical staff was found in practice to be very defective, and the next legislation by Congress which was of interest to the Medical Department was a bill approved 2 July, to re-organize that service so as to bring the medical officers of the volunteers more directly under the control of the Surgeon General, and assimilate their grades more nearly to those of the regular staff. It was as follows:

"*Be it enacted, etc.*, That there shall be appointed by the President, by and with the advice and consent of the Senate, forty surgeons and one hundred and twenty assistant surgeons of volunteers, who shall have the rank, pay and emoluments of officers of corresponding grades in the regular army; *Provided*, That no one shall be appointed to any position under this Act, unless he shall previously have been examined by a board of medical officers to be appointed by the Secretary of War, and that vacancies in the grade of surgeon shall be filled by selection from the grade of assistant surgeon, on the ground of merit only; and *provided further*, That this Act shall continue in force only during the present rebellion.

"*SEC. 2. And be it further enacted*, That from and after the passage of this Act, Brigade Surgeons shall be known and designated as Surgeons of Volunteers, and shall be attached to the General Medical Staff, under the direction of the Surgeon General; and hereafter such appointments for the medical service of the army shall be appointed Surgeons of Volunteers.

"*SEC. 3. And be it further enacted*, That instead of 'one Assistant Surgeon,' as provided by the second section of the Act of 22 July, 1861, each regiment of Volunteers in the service of the United States shall have two Assistant Surgeons."

The Medical Board for the examination of these new officers consisted of Surgeons John H. Brinton and Meredith Clymer, U. S. Volunteers, and Assistant Surgeon Warren Webster, U. S. Army.

On 27 December, an Act was approved "To facilitate the discharge of disabled soldiers from the army, and the inspection of convalescent camps and hospitals," by the appointment of additional Medical Inspectors. The following is the text of this bill:

"*Be it enacted, etc.*, That there shall be added to the present Medical Corps of the army, eight Medical Inspectors, who shall immediately after the passage of this Act, be appointed by the President, by and with the advice and consent of the Senate, without regard to their rank when so selected, but with sole regard to qualifications, and who shall have the rank, pay and emoluments now authorized by law to officers of that grade.

"*SECTION 2. And be it further enacted*, That the officers of the Medical Inspector's Department shall be charged in addition to the duties now assigned to them by existing laws, with the duty of making regular and frequent inspections of all military general hospitals and convalescent camps, and shall upon each such inspection, designate to the Surgeon in charge of such hospitals or camps, all soldiers who may be, in their opinion, fit subjects for discharge from the service, on Surgeon's certificate of disability, or sufficiently recovered to be returned to their regiments for duty, and shall see that such soldiers are discharged or so returned; and the Medical Inspecting Officers are hereby empowered under such regulations as may be hereafter established, to direct the return to duty, or the discharge from service, as the case may be, of all soldiers designated by them."

When this bill was first introduced into the Senate from the Military Committee, it contained a clause providing for the appointment of two additional Medical Inspectors General; but this was stricken out. It was endeavored however, to carry out the suggestions of the Surgeon General in another bill reported by Mr. Wilson from the Military Committee, on 19 January, 1863, "To provide for the greater comfort of the sick and wounded soldiers, and to promote the efficiency of the Medical Department of the army." This bill provided for the addition to the Medical Corps, of one Assistant Surgeon General, two Medical Inspectors General, twenty Surgeons, and forty Assistant Surgeons; also ten Medical Storekeepers, and as many Medical Cadets as the Surgeon General might deem necessary for the public service. So much of the first section of the Act approved 30 June, 1834, as forbade the promotion of Assistant Surgeons before they had served five years was repealed. These measures it will be observed, were precisely those urged by the Surgeon General in his last annual report. In addition, the bill contained the following changes: In the organization of army corps,

each corps was to have besides the staff authorized by existing laws, a Medical Director, with the rank, pay and emoluments of Colonel of cavalry. All Medical Directors of departments, and the senior Surgeon on duty in the Surgeon General's office, were given similar rank. Fifty Surgeons and two hundred and fifty assistant Surgeons were added to the volunteer medical staff. At the request of the Surgeon General a section was proposed by Mr. Pomeroy, of Kansas, providing for the selection of three officers from the regular or volunteer corps, who should be assigned to duty in the Surgeon General's office, as chiefs of the Medical, Sanitary and Statistical branches of the Medical Department, and who were to have, under the direction of the Surgeon General, the control of all matters pertaining to these branches, and to constitute with the Surgeon General a council of advice upon all matters which might be referred to them by the Surgeon General; such chiefs of branches to have while acting as such, the rank, pay and emoluments of Colonels of cavalry, and to rank next after the Surgeon General. This section met with so much opposition from the various senators, that after a long discussion it was withdrawn. This bill was debated on several occasions, Senators Wilson and Pomeroy urging its passage and others opposing. Finally all of the bill, except the section providing for an addition to the volunteer force was stricken out, and in this emasculated shape it passed the Senate. In the House it was referred to the Military Committee, on 26 January, and that was the last heard of it.

The Medical Inspectors appointed under the Act of 27 December, 1862, were as follows: Surgeon Joseph K. Barnes, U. S. Army; Surgeons Frank H. Hamilton, Peter Pineo and Augustus C. Hamlin, U. S. Volunteers; Doctor George K. Johnson, of Michigan; Surgeon John E. Summers, U. S. Army; Doctor N. S. Townshend, of Ohio, and Surgeon George W. Stipp, U. S. Volunteers.

In a bill for promoting the efficiency of the Corps of Engineers, etc., approved 3 March, 1863, occurs the following section relative to the duties of medical officers:

"SECTION 8. *And be it further enacted,* That the officers of the Medical Department shall unite with the line officers of the army, under such rules and regulations as shall be prescribed by the Secretary of War, in supervising the cooking within the same, as an important sanitary measure; and that the said Medical Department shall promulgate to its officers such regulations and instructions as may tend to insure the proper preparation of the ration of the soldier."

As has been already mentioned, a number of the medical officers of the army were held as prisoners of war by the enemy soon after the beginning of the rebellion; some of them being detained in rebel prisons for upwards of a year. Efforts had been made for the arrangement of a cartel, by which non-combatants on either side should be exempted from the penalties of capture on the field of battle. These had proved unsuccessful, but our Government willing to take the initiative in a good cause, plainly enunciated its views upon this subject in paragraph 53 of General Orders, No. 100, dated 24 April, 1863, containing "Instructions for the government of the armies of the United States in the field," drawn up by Professor Francis Lieber, LL. D.:

"The enemy's Chaplains, officers of the medical staff, apothecaries, hospital nurses and servants, if they fall into the hands of the American army, are not to be treated as prisoners of war unless the commander has reason to detain them. In this latter case, or if at their own desire, they are allowed to remain with their captured companions, they are treated as prisoners of war, and may be exchanged if the commander sees fit."

After this, though there was no formal cartel on the subject between the two governments, Surgeons and other non-combatants were generally released as soon as captured.

On 10 August, 1863, Medical Inspector General Thomas F. Perley resigned and Medical Inspector Joseph K. Barnes was promoted to fill the vacancy. Soon after his promotion the following order was issued by the Secretary of War relative to the duties of Medical Inspectors:

"WAR DEPARTMENT.

"ADJUTANT GENERAL'S OFFICE,

"GENERAL ORDERS, No. 308.

"Washington, September 12, 1863.

"The Medical Inspector General has under the direction of the Surgeon General, the supervision of all that relates to the sanitary condition of the army, whether in trans-

ports, quarters or camps; the hygiene, police, discipline and efficiency of field and general hospitals; and the assignment of duties to Medical Inspectors.

“Medical Inspectors are charged with the duties of inspecting the sanitary condition of transports, quarters and camps, of field and general hospitals, and will report to the Medical Inspector General, all circumstances relating to the sanitary condition and wants of the troops and of hospitals, and to the skill, efficiency and conduct of the officers and attendants connected with the Medical Department. They are required to see that all regulations for protecting the health of troops, and for the careful treatment of and attendance upon the sick and wounded are duly observed.

“They will carefully examine into the quantity, quality and condition of medical and hospital supplies, the correctness of all medical, sanitary, statistical, military and property records and accounts pertaining to the Medical Department, and the punctuality with which reports and returns, required by regulations, have been forwarded to the Surgeon General.

“They will ascertain the amount of disease and mortality among the troops, inquire into the causes, and the steps that may have been taken for its prevention or mitigation, indicating verbally or in writing to the medical officers, such additional measures or precautions as may be requisite. When sanitary reforms requiring the sanction and co-operation of military authority are urgently demanded, they will report at once in writing to the officer commanding corps, department or division, the circumstances and necessities of the case, and the measures considered advisable for their relief forwarding a duplicate of such reports to the Medical Inspector General.

“They will instruct and direct the medical officers in charge, as to the proper measures to be adopted for the correction of errors and abuses, and in all cases of conflict of views, authority or instructions with those of Medical Directors, will report the circumstances fully and promptly to the Medical Inspector General, for the Surgeon General's orders.

“Upon or near the beginning of each month, Medical Inspectors will make minute and thorough inspections of hospitals, barracks, camps, transports, &c., &c., within the districts to which they are assigned, in conformity with these instructions and the forms for inspection reports furnished them.

“Monthly inspection reports, in addition to remarks under the several heads, will also convey the fullest information in regard to the medical and surgical treatment adopted; the advantages or disadvantages of location, construction, general arrangement and administration of hospitals, camps, barracks; the necessity for improvement, alteration or repair, with such recommendations as will most certainly conduce to the health and comfort of the troops, and the proper care and treatment of the sick and wounded. When alterations, improvements or repairs requiring the action of heads of Bureaus are considered essential, special reports, accompanied by plans and approximate estimates of quantities or cost will be made.

“Medical Inspectors will make themselves fully conversant with the regulations of the Subsistence Department, in all that relates to issues to hospitals, whether general, field, division or regimental, and will satisfy themselves by rigid examination of accounts and expenditures, that the fund accruing from retained rations is judiciously applied, and not diverted from its proper purposes, through the ignorance or inattention of medical officers, giving such information and instruction on this subject as may be required. They will also give close attention to the supervision of cooking by the medical officers, whose duty it is, under the Act of Congress, of 3 March, 1863, and General Orders, No. 247, of 1863, to ‘submit his suggestions for improving the cooking, in writing, to the commanding officer,’ and to accompany him in frequent inspections of the kitchens and messes.

“They will exercise sound discrimination in reporting ‘an officer of the Medical Corps as disqualified by age or otherwise, for promotion to a higher grade, or unfitted for the performance of his professional duties,’ and be prepared to submit evidence of its correctness to the Medical Board by whom the charges will be investigated.

“Medical Inspectors are also charged with the duty of designating, to the Surgeon in charge of general hospitals and convalescent camps, all soldiers who are in their opinion fit subjects for discharge on Surgeon's certificate of disability, or sufficiently recovered to be able for duty. In all such cases they will direct the Surgeon to discharge from service, in accordance with existing orders and regulations, or return to duty those so designated.

"It is expected that all commanding officers will afford every facility to Medical Inspectors in the execution of their important duties, giving such orders as may be necessary to carry into effect their suggestions and recommendations; and it is enjoined upon all medical officers, and others connected with the Medical Department of the United States Army, to yield prompt compliance with the instructions they may receive from Medical Inspectors on duty in the Army, Department or District in which they are serving, on all matters relating to the sanitary condition of the troops, and of the hygiene, police, discipline and efficiency of hospitals.

"By order of the Secretary of War:

"E. D. TOWNSEND,
"Assistant Adjutant General."

The sanitary condition of the Departments of the South and the Gulf requiring special attention and care at this period, Surgeon General Hammond was, in the latter part of August, directed to proceed to Hilton Head, Charleston Harbor and other points on the southern coast, and give his special personal attention to the management of the medical branch of the service in those departments, making his headquarters in New Orleans, and reporting to the Secretary of War every ten days. To enable him to give his whole time and attention to this important work, and to obviate any intermission in the transaction of the routine duties of the Department, he was relieved from the charge of the bureau of the Surgeon General at Washington. On 3 September, the following order was issued, providing for the performance of the duties of chief of the Bureau during his absence:

"WAR DEPARTMENT,
"ADJUTANT GENERAL'S OFFICE,
"Washington, 3 September, 1863.

"SPECIAL ORDERS, No. 396.

EXTRACT.

* * * * *

"3. Medical Inspector General J. K. Barnes, is under the provisions of the Act of 4 July, 1836, empowered to take charge of the Bureau of the Medical Department of the Army and to perform the duties of Surgeon General during the absence of that officer. He will enter upon the duties herein assigned him without delay.

"By order of the Secretary of War:

"E. D. TOWNSEND,
"Assistant Adjutant General."

There was no further legislation by Congress in behalf of the Medical Corps in the year 1863, nor was there any in the following year, with the exception of an Act passed 11 March, 1864, and promulgated in General Orders, No. 106 from the War Department, "For the establishment of a uniform system of ambulances in the armies of the United States." This Act provided, first, that the Medical Director of each Army Corps, under the control of the Medical Director of the Army, should have entire direction and supervision over all ambulances, medicine wagons, &c., and of all officers and men detailed for ambulance duty; second, that there should be detailed in each Army Corps for ambulance duty, one Captain, one first and one second Lieutenant, with non-commissioned officers and privates, and that all persons so detailed should be examined by a board of medical officers as to their fitness for such duty. The remaining sections of the Act detailed the respective duties of the various officers, and the management of the ambulances and other property of the Corps, and defined the relations between Medical Directors and the officers detailed on ambulance duty. By an order issued a short time previously the ambulance flags for the Army were designated as follows:

"For *General Hospitals*; of yellow bunting 9 by 5 feet, with the letter H, 24 inches long, in green bunting, in the centre.

"For *Post and Field Hospitals*; of yellow bunting 6 by 4 feet, with the letter H, 24 inches long, in green bunting, in the centre.

"For *ambulances, and quidons to mark the way to field hospitals*; of yellow bunting 14 by 28 inches, with a border one inch deep of green."

On the 20 August, 1864, Surgeon General William A. Hammond was dismissed the service by sentence of a General Court Martial.

General Hammond was restored to the army and placed on the retired list as Surgeon General and Brigadier General, 27 August, 1879, under an Act of Congress, approved 15 March, 1878.

Medical Inspector General Joseph K. Barnes, who had been acting as Surgeon General ever since General Hammond departed for his southern tour of inspection, as already stated, was promoted to be Surgeon General, and Medical Inspector John M. Cuyler assigned temporarily to duty as Medical Inspector General. On 1 December, Surgeon Madison Mills was appointed Medical Inspector General *vice* Barnes promoted, and Lieut. Colonel Cuyler resumed his duties as Medical Inspector.

A Medical Board, consisting of Surgeons Tripler, King and Perin, met in Cincinnati on 18 October. But five candidates were examined, of whom two were approved.

In June, 1864, a bill was passed by the House of Representatives giving the increased rank to Medical Directors which had been repeatedly asked for during the war. It went to the Senate, and being referred to the Military Committee was reported back by them without an amendment on 2 July; but objection being made to its consideration, it was laid aside, and did not come up again until the twenty-third of the following February, when it was passed without amendment. As approved by the President the Act read as follows:

"Be it enacted, etc., That the Medical Director of an army in the field consisting of two or more army corps, and the Medical Director of a military department in which there are United States General Hospitals containing four thousand beds or upwards, shall have the rank, pay and emoluments of a Colonel of Cavalry; and the Medical Director of an army corps in the field, or of a department in which there are United States General Hospitals containing less than four thousand beds, shall have the rank, pay and emoluments of a Lieut. Colonel of cavalry. But this increased rank and pay shall only continue to medical officers while discharging such special duties, and the assignments from time to time to such duty shall be at least two-thirds of them from among the Surgeons and Assistant Surgeons of Volunteers."

Immediately after the surrender of the rebel armies in April, 1865, orders were issued by the War Department "that the chiefs of the respective bureaus of this Department proceed immediately to reduce the expenses of their respective departments to what is absolutely necessary in view of an immediate reduction of the forces in the field and garrison, and the speedy termination of hostilities." Accordingly, the energies of the Surgeon General's Office were directed during the next few months to the re-establishment of the Medical Department on a peace footing. The army boards for the examination of candidates for admission into the volunteer medical corps, which had been in session at Philadelphia, Washington, Cincinnati, and Hilton Head, South Carolina, were dissolved, as were also all those for the examination of acting assistant surgeons, medical cadets and hospital stewards. All soldiers, patients in hospital, except veteran volunteers, veterans of the First Army Corps and those belonging to the regular army, were ordered to be discharged. Medical Purveyors were directed to suspend the purchase of medical and hospital supplies, and all except the principal purveying depots were discontinued. Medical Directors received instructions to reduce as rapidly as possible the number and accommodation of the general hospitals within their respective departments, substituting post for general hospitals with all permanent commands. They were also ordered to discharge all contract physicians, civilian nurses, cooks and other employes whose services could be spared. The Assistant Surgeon General, Medical Inspector General and the medical inspectors were mustered out of service in October, those who belonged to the permanent establishment resuming their former positions in the Corps, and the remainder retiring to private life.

By the annual report of the Surgeon General it is shown how successfully these difficult undertakings were achieved. On 1 January, 1865, there were two hundred and one general hospitals in operation, and three were subsequently added. The hospital transport system included four first-class sea-going steamers, equipped with stores and supplies for five thousand beds, besides a large number of river hospital boats, hospital railway trains, ambulances, etc. By 20 October, one hundred and seventy general hospitals had been discontinued, the property turned into the purveying depots or sold and the proceeds covered into the Treasury, the patients discharged and furnished transportation to their homes, and the medical officers and attendants of all kinds mustered out. Three out of the four sea-going transport steamers had been given up, and all those employed on the rivers.

During the war, besides those who entered the regular corps, there had been appointed five hundred and forty-seven surgeons and assistant surgeons of volunteers. There were mustered into service between April, 1861, and the close of the war two thousand one hundred and nine regimental surgeons and three thousand eight hundred and eighty-two regimental assistant surgeons. During the same period there were employed under contract eighty-five acting staff surgeons, and five thousand five hundred and thirty-two acting assistant surgeons. That this large body of men, numbering almost an army in itself, was faithful to the important trusts confided to its charge is evinced not only in the numerous reports of the general officers in command of troops, but also by the special testimony of the Surgeon General, who says in his annual report for 1865:

"In conclusion, I desire to bear testimony to the ability, courage and zeal manifested throughout the war by the officers of the Medical Department, under all circumstances and upon all occasions. With hardly an exception they have been actuated by the highest motives of national and professional pride, and the number who have been killed and wounded bears most honorable testimony to their devotion to duty on the field of battle."

That they did not shirk the post of danger is most conclusively shown by the following record of the casualties of the regular and volunteer staff during the war: Thirty-two were killed in battle or by guerrillas or partizans, and nine by accident. Eighty-three were wounded in action, of whom ten died. Four died in rebel prisons, seven of yellow fever, three of cholera, and two hundred and seventy-one of other diseases, most of which were incidental to camp life or the results of exposure in the field, making a roll of honor embracing four hundred and nine names of those who it is a common error to consider not exposed to the dangers and chances of war.

An idea of the amount of labor performed by the Medical Staff will be obtained, when it is stated that one million fifty-seven thousand four hundred and twenty-three cases of wounds and diseases occurring among white troops, were treated in general hospitals alone, not including the vast number that were attended in regimental and post hospitals. The cost of maintaining the Medical Department formed no small portion of the total expenses of the war, and it is a matter of just pride that it can be said that the medical disbursing officers performed their duties honestly and faithfully, and that the immense quantities of medical supplies distributed all over the country were, almost without exception, properly accounted for. The expenditures on behalf of the Medical Department to the close of each fiscal year, on 30 June, from 1861 to 1866, were as follows:

1861.....	\$ 194,126 77
1862.....	2,371,113 19
1863.....	11,594,650 35
1864.....	11,025,791 33
1865.....	19,328,499 23
1866.....	2,837,801 37

making a total of forty-seven million three hundred and fifty-one thousand nine hundred and eighty-two dollars and twenty-four cents, (\$47,351,982 24) expended during the war (exclusive of salaries of commissioned officers,) for the benefit of the sick and wounded soldiers of the nation.

There is no doubt that very much of the success which was attendant on the administration of the Medical Department during the rebellion, was due to the uniformity with which every judicious recommendation from the Surgeon General was acquiesced in by the Secretary of War. This indefatigable official, overburdened with the gigantic responsibilities incident to the period, yet found time to give his special attention to the improvements asked for by the Surgeon General to increase the administrative efficiency of the hospital service. Prompt to censure and unrelenting in punishing any neglect in a medical officer, he was equally ready to commend where praise was due.

The Surgeon General but expressed the opinion of every person connected with the Medical Staff in writing his report for 1866 to the Secretary:

"It is a matter of just pride and congratulation to the medical profession throughout the civilized world, that your deep interest in the health and hygienic condition of the army, your constant vigilance and most liberal assistance in all that could in

any manner conduce to the greater comfort and welfare of the sick and wounded, and your official recognition of faithful and meritorious service by officers of this Department, have been responded to on their part by redoubled exertions, unflinching devotion to duty, and an *esprit du corps* that secures to it professional talent of the highest order. Letters from the most eminent surgeons and physicians in Europe, in acknowledgment of publications from this office, do not express more astonishment at the magnitude of the war, than admiration of the unvarying support and encouragement extended to the Medical Staff under your administration of the War Department."

Previous to the war of the rebellion the only brevet ever conferred on a medical officer was in the case of Surgeon General Lawson, who at the close of the Mexican war was brevetted a brigadier general for "meritorious services" in the campaign which resulted in the capture of the city of Mexico. At the close of the rebellion, however, owing to the persistent efforts of the Surgeon General, in which he received the cordial support of Mr. Stanton, the principle was at last recognized that medical officers who were equally exposed on the battle-field with officers of the line, and were frequently called upon to face the more appalling dangers of pestilence in camp and hospitals, were equally entitled to some mark of distinction for the faithful discharge of duty with those of other branches of the service. Consequently, at the termination of the war and after the subsequent epidemics in 1866, the Medical Staff was not overlooked in the distribution of these marks of distinction. The Surgeon General was brevetted a major general, twelve surgeons to the rank of brigadier general, fourteen surgeons and one assistant surgeon to the rank of colonel, fifty-three surgeons and assistant surgeons to the rank of lieutenant colonel, sixty-three assistant surgeons to the rank of major, and eight to the rank of captain,

The seventeenth section of the Act of 28 July, 1866, contained a clause, that "persons who have served as *assistant surgeons* three years in the volunteer service shall be eligible for promotion to the grade of captain." Although not so intended, the phraseology of this clause had the effect of excluding from such eligibility all those who had served in the grade of surgeon, thus confining its benefits to but a small proportion of the volunteer medical officers. This was remedied by adding a section to a bill approved 2 March, 1867, so as to make the clause in question read, "all persons who have served as *surgeons or assistant surgeons, etc.*" By the same Act military storekeepers, including those of the Medical Department, were given the rank, pay and emoluments of captains of cavalry.

The nomination of Surgeon E. A. Abadie to be Assistant Medical Purveyor having failed of confirmation by the Senate, expired by constitutional limitation on 4 March, 1877, and he resumed his former position as surgeon. On 20 July, Surgeon J. H. Baxter, U. S. Volunteers, received the appointment to fill the vacancy.

The year 1867 was one of unusual fatality to the officers of the Medical Staff. Surgeon Robert O. Abbott, so well known as the efficient Medical Director of the Department of Washington throughout the war, died on 16 June, after a lingering illness. Few were better known in the army and none more universally beloved than this high minded and able officer and gentleman.

Severe epidemics of yellow fever at the south, and of cholera at the west, caused the loss of a number of valuable lives. No less than thirty-one medical officers were attacked with yellow fever while battling with that pestilence along the Gulf coast, of whom ten died. These were, Surgeon George Taylor, Surgeon-in-Chief of the District of Texas, who died at Galveston on 5 August; Assistant Surgeon Charles H. Rowe, on 5 September, at Galveston; Assistant Surgeon J. Sim Smith, on 8 September, at Port Jefferson, Florida; Assistant Surgeon Samuel Adams, on 9 September, at Galveston; and six citizen physicians employed under contract. By cholera the army was deprived of the services of Assistant Surgeon G. M. McGill, who died, 20 July, on the plains, while *en route* with troops to New Mexico.

A bill passed Congress on 4 March, 1872, to provide for the appointment of a Chief Medical Purveyor. It was as follows:

"*Be it enacted, etc.*, That the President of the United States be, and hereby is authorized to appoint by selection from the present assistant medical purveyors, by and with the advice and consent of the Senate, a chief medical purveyor of the army, to fill the vacancy now existing. Nothing herein shall be construed to increase the pay of the officer appointed to fill said vacancy."

Assistant Medical Purveyor J. H. Baxter was promoted to be Chief Medical Purveyor in accordance with the provisions of this Act.

The large number of vacancies in the Medical Department rendered it impossible to supply all the military garrisons in the country and provide the necessary details for other duty, except by the employment of a large number of citizen physicians. It became therefore very advisable that the legislation forbidding promotion and appointment in the staff corps should be repealed, in so far as it referred to the Medical Department. The Surgeon General earnestly urged such action by Congress in his annual reports for 1870, 1871 and 1872, and it was strongly recommended in the latter year by both the Secretary of War and the President. Nevertheless, no action was taken thereon. At the last session of Congress several bills were introduced with this object in view, and one of them passed the Senate on 3 March, but the final adjournment of Congress taking place the next day, it failed to reach a vote in the House of Representatives.

We have now in a rapid manner sketched the more important events in the history of the Medical Staff, from its inception in 1775 to the present time. Want of space has prevented the consideration of much valuable material on file in the Surgeon General's Office, but as this is chiefly of a personal character, relating rather to individuals than to the corps at large, it was thought best to omit everything which was not of general interest either in the decision of disputed points, the establishment of precedent, or the maintenance of the high standard of the Corps and the profession. It now remains only to mention the work performed under the auspices of the Surgeon General's Bureau since the close of the war.

The Army Medical Museum has continued to increase in interest and importance from the date of its incipience. It is now permanently located in the old Ford theatre building, in which the lamented Lincoln was assassinated, which was purchased for this purpose in 1866, and having been completely refitted and rendered fire-proof, was opened to the public on 14 April, 1867. Since that time it has been visited yearly by many thousand persons, embracing not only the ordinary class of sight-seers, but also medical and scientific men from all parts of this country and Europe, by whom it is pronounced the most complete collection of the kind in the world. It is divided into sections embracing specimens in surgery, medicine, anatomy, microscopy and comparative anatomy. The surgical section contained on 1 July, 1872, six thousand and ninety-three preparations, embracing gunshot fractures of every description, plaster casts showing the results of operations, tumors, calculi, missiles of war, surgical instruments of every variety and a large number of wet preparations illustrative of every description of surgical disease and injury. The medical section contained eleven hundred and twenty-five specimens and is especially rich in its illustrations of the diseases incident to camps and hospitals, though by no means confined to this speciality. In the microscopical division are nearly six thousand specimens carefully mounted and labelled, affording a wide field for the study of histology and medical and surgical pathology, which is being rapidly increased under the direction of able and experienced microscopists. The anatomical collection embraces nearly a thousand crania of existing tribes of Indians, a series of skulls from tumuli and many rare specimens of artificial deformities of the cranium, and will eventually become a rich field for ethnological research. In the section of comparative anatomy are two hundred and ninety-five complete skeletons of animals, and upwards of seven hundred crania of birds, reptiles, fishes and mammals. To all these should be added a complete collection of models of ambulances, litters and other appliances for the transportation of sick and wounded, artificial limbs of every known design, a collection of photographs illustrative of the result of operations, etc., etc.; making in all upwards of fifteen thousand specimens on the catalogue, which is being constantly increased by the receipt of new preparations from all parts of the country.

In the same building with the Museum is situated the Library of the Surgeon General's Office. At the commencement of the war this contained but about three hundred and fifty text books and journals. In October, 1865, the number of volumes was about eighteen hundred, since which time it has increased rapidly by purchase, donation and exchange, until at the present time it numbers about twenty-five thousand volumes and thirteen thousand single pamphlets, most of the latter being unbound theses. Among the former are six hundred and fifty-eight bound volumes of the Paris theses, and upwards of six hundred volumes of pamphlets, making the total number of titles nearly

forty thousand. About two thousand of the books are not of a professional character, being works on the history of the late war, on meteorology, on physics, and various public documents. The library is especially complete in its collection of American medical periodicals. It is open to the public under the same regulations as the Library of Congress. Its future depends to a great extent on the liberality of Congress, but it may be confidently expected that at no distant day it will be recognized as the standard medical library of this country, and will compare not unfavorably with the best collections of the old world. To the industry and sound bibliographic judgment of Assistant Surgeon John S. Billings, who has devoted his time to this work, in addition to the ordinary duties devolving upon his official position, much credit is to be given in connection with the selection of the books now composing the collection and the preparation of a complete catalogue of authors and an alphabetical index of subjects.

The army chemical laboratory is also situated in this building, and is employed in such chemical investigations as are needed from time to time by the Surgeon General, such as analyses of specimens of water sent to it from various parts of the country, the detection of adulterations in the various constituents of the soldier's ration and in medicines and other articles furnished by the Supply Table, etc., etc. It has, under the able direction of Acting Assistant Surgeon B. F. Craig, become a most useful and important adjunct to the Surgeon General's Office.

Since the close of the war the Surgeon General has printed, by authority of the Secretary of War, the following books:

Circular, No. 6. War Department, Surgeon General's Office, Washington, 1 November, 1865. Report on the Extent and Nature of the Materials available for the preparation of the Medical and Surgical History of the Rebellion. Quarto, pp. 166.

Catalogue of the United States Army Medical Museum. Prepared under the direction of the Surgeon General, U. S. Army. Washington, 1866. Quarto, pp. 960.

Circular, No. 5. War Department, Surgeon General's Office, Washington, 4 May, 1867. Report on Epidemic Cholera in the Army of the United States during the year 1866. Quarto, pp. 65.

Circular, No. 7. War Department, Surgeon General's Office, Washington, 1 July, 1867. A Report on Amputations at the Hip-Joint in Military Surgery. Quarto, pp. 87.

Circular, No. 1. War Department, Surgeon General's Office, Washington, 10 June, 1869. Report on Epidemic Cholera and Yellow Fever in the Army of the United States during the year 1867. Quarto, pp. 156.

Circular, No. 2. War Department, Surgeon General's Office, Washington, 2 January, 1868. A report on the Excisions of the Head of the Femur for gunshot injury. Quarto, pp. 141.

Circular, No. 4. War Department, Surgeon General's Office, Washington, 5 December, 1870. Report on Barracks and Hospitals, with descriptions of Military Posts. Quarto, pp. 494.

Circular, No. 2. War Department, Surgeon General's Office, Washington, 27 July, 1871. Approved Plans and Specifications for Post Hospitals. Quarto, pp. 14.

Circular, No. 3. War Department, Surgeon General's Office, 17 August, 1871. Report of Surgical Cases treated in the Army of the United States, from 1865 to 1871. Quarto, pp. 296.

Catalogue of the Library of the Surgeon General's Office, with an alphabetical index of subjects. Washington, 1872.

In addition to the above, during the period referred to, there have been written by officers of the Medical Department the following special reports:

On the hygienic fitness of the present uniform and allowance of clothing for enlisted men. Washington, 31 January, 1868.

A report made to the Commissioner of Agriculture on the Diseases of Cattle in the United States. 1869.

Report to the Surgeon General of the United States Army on the Magnesium and Electric Lights as applied to Photo-micrography. 5 January, 1870.

Report to the Surgeon General of the United States Army on the Oxy-calcium Light as applied to Photo-micrography. 4 June, 1870.

Report to the Surgeon General of the United States Army on certain points connected with the Histology of minute blood vessels. 6 July, 1870.

Report to the Surgeon General on an improved method of photographing Histological Preparations by Sunlight. 1871.

Report to the Secretary of War on Quarantine on the Southern and Gulf Coasts of the United States. 4 December, 1872.

Report to the Surgeon General of the Army on the Minute Anatomy of two cases of Cancer. 1872.

"Copies of these publications have been distributed to medical officers of the army and navy, to a large number of volunteer surgeons who served during the war and to many colleges and learned societies. They have been adjudged at home and abroad to contain real and valuable additions to human knowledge on the special subjects of which they treat, and the demand for them has been so great, that the large editions printed proved insufficient, and it was necessary to refuse copies to many applicants."

The work done in the microscopic section of the Museum in the direction of photomicrography has also been very extensive and has been highly appreciated by the most eminent microscopists in all parts of the world, to whom copies of many of the photomicrographs were sent. So have also the efforts made to disseminate a knowledge of the collections of the Museum by means of photographs, models of ambulances and hospitals, of improvements in artificial limbs and surgical appliances, which were exhibited at the Paris Exposition and sent to various governments and leading societies in Europe. A collection of four volumes of photographs, illustrating every kind of surgical injury, modes of repair and the results obtained by conservative surgery, has been distributed in this manner and met with the most flattering reception from such professional leaders as Larrey, Legouest, Longmore, Pouchet, Parkes and others. All of this work, however, important and valuable as it is, has been subordinate to the "Medical and Surgical History of the War," of which the first part, embracing two large quarto volumes, has just been published and is now being distributed. It is yet too early to ascertain the verdict of the professional world on this great storehouse of facts relative to military medicine and surgery, but the results of the past warrant us in believing that a like appreciation will be shown to the labors of the distinguished compilers of these volumes, and still greater credit accrue to the Medical Department from their publication than have already been accorded to their predecessors.

The work above spoken of has been of such a character as to be of comparatively little interest outside of the medical and scientific world. In addition the Medical Bureau since the war has been engaged in other labors which appeal most forcibly to the sympathies of the community at large. The "Record and Pension Division" of the Surgeon General's Office has been the means of furnishing information in many thousand cases of application for pension for disease or disability contracted during the war, verifying from its admirably kept records the justice of the claim or protecting the government in the event of a fraudulent application. From 1 July, 1865, to 30 April, 1873, applications for information from the various departments of the government, as well as from the parties concerned, have been made in two hundred and thirty-eight thousand three hundred and ninety-five cases. Answers have been returned in two hundred and thirty-seven thousand two hundred and eighty-nine of these, leaving but eleven hundred and six unreturned at the last date. These came from the following offices:

	RECEIVED.	RETURNED.	REMAINING.
Adjutant General,	74,464,	74,167,	297.
Commissioner of Pensions,	140,096,	139,294,	802.
Paymaster General,	11,972,	11,972,	
Miscellaneous,	11,863,	11,856,	7.

The supplying of artificial limbs to disabled soldiers was placed in charge of the Medical Department at an early period during the war. Up to 30 April, 1873, there had been furnished the following number and variety:

Arms, 3,177; Legs, 5,894; Feet, 59; Apparatus for resections, 234; making a total of 9,364.

One hundred and five years have now elapsed since the first humble beginning of the Army Medical Department at the siege of Boston. The successors of those pioneers in

American military surgery can say with pride that during that long period they have taken no step backward. Under the leadership of such wise and accomplished chiefs as MORGAN, SHIPPEN, COCHRAN, TILTON, LOVELL and LAWSON, the Corps steadily advanced from the inchoate condition of its birth to the comparative perfection in organization, discipline and learning to which it had attained on the outbreak of the Rebellion. Under their equally distinguished successors, who were forced to meet the emergencies of a gigantic campaign with an experience gained on the most limited scale, the Corps proved true to its past record, and has astonished the world, not less by the vastness of its operations than by the success of their accomplishment. During the Revolution we but copied the systems in vogue in European armies, and unavailingly endeavored to adapt them to the partisan warfare which characterized the campaigns of that period. To-day the great surgeons of Europe recognize their indebtedness to us for much that constitutes progress in military medicine, hygiene and surgery, and European governments send special commissions to avail themselves of the vast treasures of experience accumulated by the Medical Department in our last great war. In the past history of the Medical Corps, in the gradual increase of its reputation and usefulness, in the high esteem in which it has always been held by the rest of the army, in the distinguished names which have adorned its ranks, as well as in the encomiums which have recently been so freely accorded to it, there is every encouragement to maintain a high standard of individual and professional integrity, and the *esprit du corps* which is so important an element of its very existence.