broken in another quarter. July 1, 1862, Surgeon Jonathan Letterman reported to General McClellan to be medical director of the Army of the Potomac. He was only 38 years old, having entered the service in 1849, and had just received his promotion to major. The Army of the Potomac was at this time crowded with sick and with the wounded of the seven days' fight, and in the retreat to Harrison's Landing most of the medical equipment and supplies had been lost or expended. In the course of a month he brought order out of this chaos, and at the same time drew up a plan for an ambulance corps—simple, far-reaching and effective—which General McClellan was quick to adopt. The personnel for this corps was obtained by transfers of officers and men from the line, and they, as well as the ambulances and other transportation, were placed entirely in the hands of the medical directors of the several army corps. A distinctive uniform and a simple drill were prescribed. This organization was announced in orders apparently without reference to Washington on August 2, and was soon followed by a scheme for regimental medical service and the establishment of division field hospitals in October. These taken together made a complete workable system, which at once made a new epoch in medical organization, and placed the Army of the Potomac far ahead of any military establishment in the world in this respect.

Meanwhile the system had its first trial at Antietam September 7, where the wounded of the Army Corps from the Army of the Potomac were promptly removed from the field and cared for, being in marked contrast with the experience of the wounded of the other wing made up of troops from Pope's army. In the bloody battle of Fredericksburg, where, in addition to the great number of wounded, was added the confusion of a defeat, the ambulance companies nevertheless did their work with smoothness and dispatch, and the wounded were transported without confusion or delay to the division field hospitals. As reported by Surgeon Charles O'Leary, medical director of the Sixth Corps, it "afforded the most pleasing contrast to what we had hitherto seen during the war."

This medical organization soon spread to the other armies of the United States, and was formally adopted by Congress in the spring of 1864. It was not copied from European models, but, on the contrary, has been, in its essential features, adopted by all civilized nations, and it is probable that the name and fame of Jonathan Letterman are better known to-day to the military surgeons of Europe than in his own country. Nor during his lifetime did this great and beneficent genius receive any promotion or any reward other than the commendation of his general and the admiration of his professional comrades. This splendid constructive work was done, and the vast responsibilities of chief medical officer of a great army were met and surmounted by a man who was given only the rank and pay of a major. When the Surgeon General proposed that the medical directors of the armies under McClellan and Halleck be given the temporary rank of colonel, which was enjoyed by other staff officers, the War Department returned the ungracious and fatuous reply: "Refused unless it can be shown that the skill and efficiency of surgeons are increased by an increase of rank and pay." This rank was afterward given to the medical directors of armies in the field by the Act of Feb. 23, 1865. It is not surprising that Letterman, broken in health by his great labors and disgusted at the blind ingratitude of those in authority, re-

signed from the service in December, 1864, and died in San Francisco some years later.

The Medical Department during the Civil War disbursed over \$47,000,000, and cared for 1,057,423 sick in its general hospitals alone, without counting those that passed through the field and regimental hospitals. Of the medical staff, 115 were shot in battle, of whom 42 died, and 285 died of disease.

This great struggle has left behind it as monuments of the labors of the medical profession, the Army Medical Museum and the great national institution known as the Library of the Surgeon-General's Office. The record of their professional work is given in the "Medical and Surgical History of the Rebellion," which, in spite of the advances in professional knowledge since that time, remains an inexhaustible mine of statistical information, while the reports of medical directors in the appendix are of permanent value and interest to all who are interested in the great and ever-recurrent problems of medico-military administration.

(To be continued.)

Clinical Reports.

GENERAL SYSTEMIC INFECTION BY THE DIPLOCOCCUS OF NEISSER COMPLICATING CHRONIC GONORRHEA.

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U. S. Army General Hospital of the Presidio,
SAN FRANCISCO.

A case is herewith presented of gonorrheal pyemia, which I believe is the first authenticated one in the history of this hospital. This case presents a peculiar feature, interesting and instructive from a clinical standpoint, in that the microscopic examination of smears, and the cultures, show a pure gonococcus infection.

Patient.—D. G. W., private, Company K, Eleventh Infantry, was admitted to this hospital, Jan. 15, 1904, complaining of pain and swelling in muscles of right side of neck, right arm, right leg, and left arm. No other symptoms were complained of, except slight temperature and coated tongue.

Previous History.—Had pertussis when a boy; had typhoid fever six years ago, which was of three months' duration and quite severe; had mumps five years ago, no complications; had measles at Fort McPherson, Ga., three years ago, and malaria in Philippines in 1902. From these diseases he fully recovered and was in good health when he enlisted.

Present Trouble.—In June, 1900, patient had a severe attack of gonorrhea, complicated by an epididymitis of the right side, which he says was cured after about two months' treatment, and also the discharge from urethra ceased. While en route from Manila, P. I., to San Francisco, the patient had intercourse at Nagasaki, Japan, but emphatically denies that he had any symptoms of gonorrhea, nor any inconvenience whatever until about two days before arrival at San Francisco, when he noticed pain and swelling of the muscles above-mentioned, namely: of the right sternomastoid, the right shoulder, the right thigh posteriorly, and left upper forearm. These localities were tender, red and swollen, but even at this time no discharge had been noticed from the urethra until the day he was admitted to this hospital.

Examination.—The day after admittance, Jan. 16, 1904, a circumscribed abscess was found, involving the extensor carpi ulnaris and extensor minimi digiti muscles at the upper part of the forearm, about one and one-half inches below the inner condyle of the humerus. Another abscess at the lower anterior border of the right sternomastoid muscle just underneath the latter. The right biceps was hard and indurated about its middle, and the flexor muscles of the thigh were in like condition. Some tenderness at the right shoulder just at the anterior border of the deltoid muscle.

Treatment.—These inflamed localities were carefully cleaned externally and wet dressings of bichlorid of mercury (1-2,000 solution) applied, and urethra was irrigated twice daily with protargol (solution 1 per cent.). January 21 the abscess of the left forearm was opened and about 45 c.c. of pus was evacuated. Two smears of this pus were taken for microscopic examination. The cavity was flushed with hot bichlorid solution, packed with iodoform gauze, and dressed antiseptically. The abscess at the border of the right sternomastoid muscle was opened at this time also, carefully cleaned out and packed with gauze.

Course.—On January 22 the swelling at the junction of the right deltoid and pectoralis major muscles had developed to such an extent that fluctuation was detected and it was promptly opened. A culture of the pus was made on blood serum, and the cavity flushed out and packed with iodoform gauze. As no more abscesses were in evidence, the patient was placed on light nutritious diet, bowels kept open by salines, and whiskey given every four hours. The pus from the last abscess, that of the shoulder, was also obtained on a cover glass and prepared for staining for microscopic examination. It showed innumerable gonococci and nothing else, the cocci being more plainly seen in this specimen than any previous ones. A blood count showed a marked leucocytosis: 66,000.

On January 24 the blood serum culture showed a typical growth of the gonococcus in yellowish isolated spots on the culture media.

The patient at this date, January 30, is improving daily, and gaining in weight. No further complications have been noticed, and by his own statements he feels better than he has for two years.

Comments.—It is highly probable that this case was one of pyemia of some duration, more or less latent until a new stimulus was awakened by the second infection acquired in Japan, and not fully developing until two or three weeks afterward.

Thanks are due Lieut. Chas. F. Craig, assistant surgeon, U. S. A., pathologist at this hospital, for the excellent demonstrations, microscopically and culturally, of the specimens of this case, and due credit is also given to Lieut. J. C. Gregory, assistant surgeon, U. S. A., who transferred the case to the writer with the suggestion that the abscesses might be due to gonorrhea, as the patient had a discharge from urethra at the time he was transferred from a medical to the genito-urinary ward.

Patients having gonorrhea, suddenly developing abscesses of the muscles, etc., or of internal organs with no other appreciable cause, may be suspected, with reason, of having a gonorrheal pyemia, but the diagnosis should be guarded until the condition is assured by a bacteriologic examination.

MULTIPLE CALCULI IN THE MALE URETHRA CAUSING OCCLUSION.

RAYMOND F. METCALFE, M.D.

First Lieutenant and Assistant Surgeon, U. S. Army.

MANILA, P. I.

History.—G. I., a Filipino male, aged 25 years, gave the following history: Eight years ago, while urinating, he was taken with a sudden, severe lancinating pain in the penis and along the entire course of the urethra. From that time he states that he was never free from pain, which was exaggerated by urination and at times an acute exacerbation would occur which would confine him to his bed. His urine was tinged with blood, and he passed it only twice in the twenty-four hours on account of the severe pain which it caused. One of these acute attacks occurred Dec. 2, 1903.

Examination.—December 5, I was called to see the patient by Contract-Surgeon Jones. The temperature was 102 F., pulse 110. The scrotum was greatly enlarged, dark and congested, the skin tense and shiny, with two small areas on the anterior surface showing signs of necrosis; the perineum was bulging. Midway between the scrotum and the anus, a little to the left of the median line, was the mouth of a fistula which was discharging urine mixed with pus. The patient was

in great agony and could not stand the slightest pressure on the scrotum. He was removed to the hospital at once and anesthetized to allow thorough examination, and operation, if necessary, the appearance of the tissues suggesting extravasation of urine. The patient had been unable to pass urine except a few drops at a time, for several days. A silver catheter was tried and three inches from the meatus it grated against a substance like stone and would go no further. A filiform bougie was tried with the same result. A probe inserted in the fistula grated against the same object.

Operation.—With the patient in the lithotomy position, I made a perineal incision two inches long in the median line. As a guide could not be passed and as the tissues were edemic, the urethra was found with some difficulty. A hard mass could be distinctly felt to one side of the membranous ure-

The stones, one-half actual size.

thra; an incision was made over this mass and an oval concretion, one and three-quarters inches by one inch and weighing twelve and one-half grams was removed. It was lodged in a sacculated pouch formed by a dilatation of the urethra, and along the course of the urethra and posterior to the above were five other similar but smaller concretions with a combined weight of nineteen and one-half grams. Each stone was surrounded by a considerable amount of pus.

The wound was flushed and a catheter introduced into the bladder and about eight ounces of strong smelling urine removed. No stones could be detected in the bladder, so a catheter was introduced and left *in situ*, a siphon tube attached, and incision packed with gauze. Recovery was uneventful.

First Reserve Hospital.

New Instrument.

AN IMPROVED RETRACTOR FOR THE SO-CALLED RADICAL OPERATION ON THE MIDDLE EAR.

HUGO FREY, M.D.

Assistant to Professor Pollitzer.

VIENNA.

The instrument shown in the illustration has proved very useful to me in making a complete opening into the tympanic cavity—the so-called radical operation. It facilitates especially the removal of the posterior wall of the bony meatus

and the outer attic wall. The curve of the hook is made with reference to the anatomic configuration of the parts, so that it retains the membranous meatus close to the anterior walls of the bony canal; the lateral projections holding back the adjacent parts of the auricle.

In using the retractor, the handle should be kept in the direction of the patient's upper lip and somewhat higher than the front part of the instrument.