ism developed, for which proximal ligation was performed, the patient dying ten days later. In one of Libman’s cases (a femoral arteriovenous aneurism) the external iliac artery was ligated in two places and divided with the intention of tying the femoral artery below the sac. Resection of the lower end of the sac was attempted, but it was perforated and profuse hemorrhage ensued, necessitating ligation of both the femoral artery and vein. The patient died a few hours later. In another case reported by Libman (operation performed by Lilienthal), the aneurism was incised, the clot removed and the cavity packed. Fifteen days later hemorrhage occurred from the arteriosclerotic sac, which was controlled by packing. Twelve days later the femoral artery was ligated, the hemorrhage having been found to come from a small rupture in the wall of the artery. Six days later the patient died of pneumonia.

The brachial aneurism observed by us was treated by proximal ligation under cocain anesthesia. Clinically, the result was perfect. The gravity of the prognosis is indicated by the fact that the patient lived but seven months after ligation of the artery, which is the longest time that any patient operated on for an embolomyotic aneurism associated with endocarditis has lived.

Cathcart reports an interesting case of an aneurism of the femoral artery, which developed during typhoid fever. We have classified this as an embolomyotic aneurism, as we believe it to be due to lodging of bacterial emboli in the vessel wall. He attempted a Matas operation, but the hemorrhage through the recurrent circulation was so severe that the femoral, the deep femoral, the superficial circumflex ilium, the superficial external iliac, the deep epigastric and the deep circumflex iliac arteries all required ligation. Gangrene developed later and an amputation was performed at the junction of the upper with the middle third of the thigh.

In three cases operations have been performed for aneurism of the superior mesenteric artery. In two of these (Libman, Baccelli) the operation has been merely exploratory. In the case reported by Stern (operation by Rehn) the diagnosis of metastatic abscess had been made, but the operation revealed an aneurism of a branch of the superior mesenteric artery. The branch on which the aneurism had developed was ligated and the cavity of the aneurism packed. The patient made a good recovery, but six weeks later another operation was performed for a second aneurism of the superior mesenteric artery. During the operation the abdominal aorta was opened, necessitating ligation. The patient died shortly after leaving the table.

We believe that in aneurisms of this type proximal ligation of the artery is the operation of choice in all cases. Injury of the tissues associated with a Matas operation would favor infection and secondary hemorrhage.

Note.—In addition to the writers already cited, the following may be found of interest on the subject:


Lejay and Beaussant: Spontane Aneurysma der Arteria femoralis, Ann. d. chirurgie, 1890, xiv, 171.


Wien Med. Wochenschr. (1897), vii, 305.


statistics in that state are available to me. Possibly the same conditions exist in other states.) Mason shows that the army is far short in its desired quota.

The accompanying list of organizations composing the Ohio National Guard shows the number of medical officers and hospital corps to which they are entitled under "Field Service Regulations." The entire present force of hospital corps, therefore, is not sufficient to man the two hospitals and two ambulance companies properly, according to regulations, leaving out of consideration entirely all the regiments and other organizations enumerated above.

The desired proportion, according to Mason's estimate, would be still larger, being 83 medical officers and 830 hospital corps men.

If we had the increase to that provided by "Field Service Regulations," we could carry out all the details of the service of the medical department with all troops, not only caring for those actually sick, but simulating also the complete service in the rear of the fighting lines.

In the absence of this desired increase of the personnel, the medical department can do little at a maneuver camp except to operate the regimental infirmaries and to conserve the hygiene of the camp and of the men of the camp. They were as far as time will permit.

In order to work out their own field problems pertaining to their own department, their only opportunity will be found in the special "Campos of Instruction for Medical Officers," such as were established this year for the first time, these being separate and distinct from the maneuver camps. To secure the benefit of these camps of instruction requires medical officers to perform two separate tours of camp duty, once with the troops to which they are attached, and again in their own special medical camp of instruction.

The question naturally arises whether it is better to have a small, insufficient force and to use it twice, or to create the proper strength to be used once. In active service the full force is necessary; why not provide it now? Many medical officers of the militia cannot afford the time to attend two separate camps.

The creation of these three camps this year enabled 170 militia medical officers from forty states, to engage in field work such as they had never been able before to practice, and to attend lectures and demonstrations on every detail of their duties in the camp and in the field, their tour of instruction proving of incalculable benefit to all those who were privileged to attend.

While it is to be regretted that only 170 militia medical officers out of the 700 in the United States attended these schools, and that twenty-five states out of the forty sent only three or less, fourteen sending only one, those who did attend are a unit in expressing their appreciation of the value of the practical instruction received and it can be taken for granted that such schools in the future will be crowded to their capacity.

These schools were held at Antietam, Md., Sparta, Wis., and San Francisco. Those at Antietam and Sparta were in operation four weeks each, instructing two classes each two weeks, that at San Francisco having one class of two weeks.

My personal knowledge relates only to the camp at Sparta during its first course of instruction, July 15 to 28, inclusive. Forty militia medical officers were in attendance, 17 from Indiana, 11 from Ohio, 7 from Michigan, 3 from Illinois, and 1 each from Wisconsin and Mississippi. The camp was located at the western end of a tract of land comprising about 2,700 acres, recently purchased by the federal government for use as an artillery maneuver and target practice camp, about six miles southeast of Sparta, Wis., on the main line of the Chicago, Milwaukee & St. Paul Railway. Three batteries and the headquarters of the Fifth U. S. Artillery were in camp and were engaged in target practice and field work daily during our tour of duty.

Our camp was adjacent to that of the artillery, and for the purpose of our instruction consisted of a complete field hospital of 90 beds, with twelve ambulances, a pack-mule train, and about eighty riding horses. The personnel consisted of ten medical officers of the medical corps, U. S. Army, with about ninety hospital corps men, comprising Company "A," Hospital Corps, from Fort D. A. Russell, Wyoming.

The first day was occupied in arranging quarters, becoming acquainted with each other, and in a critical study of the field hospital arrangements and the details of its management.

On the morning of the 16th the routine work of the school was begun and continued every day without intermission, except on Sundays, to the 28th.

Major T. S. Bratton, Medical Corps, U. S. Army, lectured every day from 8 to 10, making a careful and systematic study of "Army Regulations," the "Manual of the Medical Department," and "Field Service Regulations," as applying to the medical service, considering, in regular order, the laws applying to the organized militia, care of property, accountability and responsibility, the handling of quartermaster's and ordnance property pertaining to the hospital and in possession of hospital corps men, the management of commissary matters, hospital fund, descriptive lists, requisitions, invoices, receipts, hospital charges, savings, rations, record of examinations and assignment to duty, internal economy of hospital, register and record of sick and wounded, sales, purchases, care of property, reports and returns, inspections, muster and pay rolls, discharges, final statements, disability certificates, "line of duty," enlistments, orders, death of soldier, regimental surgeon, regimental hospital, infirmary, ambulance company, field hospital, stationary hospital, brigade surgeon, division surgeon, base hospital, chief surgeon on lines of communication, duties and authority of medical officers, and concluding with the making out of various papers. Major Bratton possessed the faculty of making the subjects interesting and attractive.

Few militia surgeons realize that an intimate knowledge of all these subjects is necessary to them. They study regulations only superficially, if at all, and dread paper-work, the so-called "red tape," simply because they are not acquainted with it. The making of correct records and the proper use of official forms is requisite to the proper protection of the interests of patients under their care, as well as of hospital corps men under their command.

Major W. E. Purviance, Medical Corps, U. S. Army, lectured in the afternoons from 2 to 4 on matters of hygiene and sanitation, both of the camp and of the individual, selection of camp sites, water-supply, cooking, diet, food, drink, bathing, inspections, disposal of wastes, latrines, earth-closets, incinerators, crematories, filters, typhoid fever and other contagious diseases, and physical examination of recruits, with demonstration of such examination. The Conley incinerator, the Lewis and Kitchen incinerator, and the Chamberland and Darnell filters, and the Forbes-Waterhouse water-sterilizer were exhibited in operation and fully explained.
On three days all were engaged in the execution of field problems under the direction of Major P. C. Fauntleroy, Medical Corps, U. S. Army, the commandant.

The first of these, on July 19, was the most extensive, calling for the performance of the work of the medical department of a division of nine regiments, engaged in an attack on the enemy, requiring the establishment of regimental collecting stations, brigade dressing stations, and a division ambulance station, an imaginary field hospital being located in the rear.

The militia officers were assigned as division, brigade and regimental surgeons, mounted hospital corps or¬dries furnished; and with the umpires, consisting of the medical officers of the army, and accompanied by ambulances, escort wagon, and a pack-mule train, reached the field of operations after a dusty ride of four miles.

The proper positions being taken in the rear of the division of the army, "Forward" was sounded by trump¬et, and all advanced through the woods, fording a stream, and encountering swampy land and almost impassable underbrush, until the cleared land was reached where casualties were to be expected.

Here the collecting stations were established, following which the dressing stations were located and orders transmitted to the ambulance station to send forward the personnel and equipment for their establishment, which being done, the ground was cleared by chopping down trees to secure space, two tents were erected, an operating table extemporized, beds prepared, instrument cases, medicine chest, and food chest opened in readiness, and a fire started to make coffee and beef-tea.

In the afternoon following this problem a discussion and criticism of the work took place under the direction of Major Fauntleroy, chief umpire, participated in by Capt. C. C. Whitcomb, U. S. Army, and Capt. F. A. Dale, U. S. Army, and various militia officers, in which errors were pointed out, and suggestions made as to improvement of the plan and equipment.

Discussion arose as to whether the ambulance station should not be a brigade unit rather than a division unit, and the opinion was expressed that for carriage on pack¬mules the food chest was too large and unwieldy.

The following day (the 20th) all the militia officers were again mounted, and acted as observers in the establish¬ment of a regimental hospital near camp and a dress¬ing station on a hill a mile distant, all the equipment for the complete regulation dressing station, consisting of tent, bedding, medical chest, surgical dressing box, food box, commode chest, stove, buckets, axes, kegs of water, extra litters, etc., being carried on four pack¬mules.

Following this the method of packing on pack-mules was exhibited, the construction of the "Arapaho" explained, the method of tying the "diamond hitch" with the lariat, improvised travois constructed, the Varney camp cooker displayed, and instruction given in saddling, mounting and riding horses.

On the 26th field work was again engaged in, the militia officers being assigned as regimental and brigade surgeons, and given details of hospital corps men, with whom search was made through the woods for wounded, represented by tagged hospital corps men. These being given treatment in accordance with the diagnosis on their tags, and removed in ambulances to the camp hospital, where the dressings and extemporized splints were examined and criticized by the umpires, and many valuable suggestions made. It was most interesting to note the ingenuity shown in the treatment of many of these cases.

After this there was hospital corps drill in loading ambulances, carrying by one and two bearers and by litters, and placing wounded men in the saddle.

The regular inspection of the hospital corps, on the 24th, was also studied by the militia officers.

An extremely important element of instruction was derived from observation of the routine operation of the camp, and the actions of officers and men; their careful and exact performance of every detail of sanitary precaution; the constant attention to cleanliness about quarters, kitchens, and at the picket lines; the extreme care given to disposal of wastes and filth; the quiet, orderly and prompt performance of every duty—in short, the magnificent regular army discipline and thorough¬ness.

As a result of the attention given to sanitation, of course, the camp was free from sickness. All excrement, all urine, and all garbage and refuse being consumed in the incinerators, and all manure dropped at the picket lines being at once removed and burned, it followed that there were very few flies, notwithstanding the fact that in our camp and that of the artillery there was a total of over 400 horses and mules.

Such object-lessons excite admiration and the desire of emulation.

During all lectures, demonstrations, and execution of field problems, the various instructors continually urged the militia officers to ask questions regarding any matters which were not entirely clear, and much valuable data were thus brought out.

All the officers of the army were at all times most courteous, affable, and patient, and the most friendly relations existed.

The foregoing exhibits briefly the extent and scope of the work of instruction provided at this school. The benefits derived from it by all the militia officers who were so fortunate as to participate in the work are enormous and beyond calculation.

The time allotted, two weeks, is all too short for work of such magnitude and variety of detail.

Realizing, however, that few doctors in civil life can afford to devote a longer time to such a camp, in addition to their regular tour of duty with the organizations to which they are attached, I am of the opinion that much of the work done at this camp might profitably be
accomplished in a preliminary or preparatory course by correspondence or other satisfactory means, thus leaving the two weeks of camp for the more advanced work, the practical field maneuvers, hospital management, command of men, etc.

A scheme providing a progressive course of training in the preliminary branches of the work, covering six months or more, and requiring a certain degree of proficiency to entitle one to the privilege of attending the two weeks of camp of instruction, should meet with great favor among medical officers of the militia, especially if at the satisfactory conclusion of the entire course some special record of honor was awarded to those who had attained proficiency.

In the absence of such course of training, I would urgently recommend that when another such school of instruction is provided by the War Department every medical officer should be required to attend.

In addition to this, it is imperatively necessary that all medical officers be supplied liberally with the blank forms used by the army, in order that they may become properly acquainted with their use.

Not only do they need each an ample stock of the new cards and other forms of the medical department, but they should have at least a sample set each of many pertaining to the ordnance, commissary, quartermasters, and pay departments—in fact, all that would be required by a company commander or a surgeon in command of a post hospital of the army, as any medical officer is liable to detail at any time to a post where a thorough knowledge of their use is necessary.

**Recommendations**

1. Medical officers should be increased 50 per cent. and the hospital corps 100 per cent.

2. Training in field service should be provided for the medical corps and the hospital corps.

3. A progressive course of training, covering six months or more, should be provided, to be completed by attendance at a camp school of instruction.

4. Attendance at such school should be permitted only to those who attain proficiency in the preliminary work.

5. The retaining of a commission as a medical officer should be dependent on participation in such systematic course of instruction.

6. Medical officers in states not represented this year should at the next similar opportunity insist on their rights, and not allow their portion of the available fund to be given to their state team at Camp Perry, as occurred in one state in the northwest this year.

2531 Gilbert Avenue.

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**Correction of Displacement of Uterus Through Inguinal Canal. Single Incision.** Littauer describes a technic which he has applied in twenty-six cases, with satisfactory and durable results, to shorten the round ligaments by access through the inguinal canal after a single incision through the soft parts. In order to accomplish this the laparotomy incision must be in the form of a curve except in the middle of the fascia which are incised horizontally across; on the sides the fibers of the internus can be easily separated, after which the inguinal canal is readily reached by working down with the finger or a sponge between the external and internal oblique muscles. The round ligaments are then treated as with the ordinary Alexander-Adams operation, the peritoneum sutured, the fascia sutured separately, and the round ligament included in the suturing of the external fascia. His communication in *Sammlung klin. Vorträge* reviews other technics while citing the special advantages of the arc incision in combination with the isolated separation of the fibers of the fascia of the externus for the inguinal celiotomy.

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**Clinical Notes**

**A NEW DEVICE FOR DROPPING ETHER AND CHLOROFORM**

J. G. ROHRIG, M.D.

IOWA CITY, IOWA

I believe that the device herein described and illustrated meets the need for a small, simple, conveniently portable instrument for dropping ether and chloroform (the former especially) continuously on the inhaler mask, the dose being perfectly and easily regulated, and the rate of drop changed any instant without removing the dropper.

This device is composed of a can (Figs. 1 and 2) with regulating mechanism for outlet, tubes for air inlets, and a screw cap for filling. The can is made in half-pound (250 gm.) and quarter-pound (125 gm.) sizes, which have proved the most convenient ones. At the side of this can, near the top, is an opening for outlet (1 c, Fig. 2). Into this opening extends a cone-shaped valve (2, Fig. 2), which is moved into and out of the opening by the finger by means of a lever (5) so arranged that it is convenient for the forefinger of the hand of the operator to remain on it (at 5 c) continually; thus the operator can at any second change the size of the outlet and thus vary the rate of drop from a strong stream to a slow drop or stop it completely by a mere movement of one finger and without removing the dropper from over the inhaler mask. The can is fitted with a screw cap (7) of large opening so that it can be quickly filled. On the side opposite to the outlet are placed two small tubes (8 and 9, Fig. 2) for the inlet of air. One tube has its external opening at top of can (1 d) and terminates near the bottom of the can on the inside. The second tube enters the bottom of the can (at 1 e, Fig. 2) and opens into the can at its top. This prevents the contents from running out if the can is turned on either end, and also allows the vapor generated by the warmth of the hand to escape by one tube while the outlet is closed without forcing liquid out of the can. The screw (5 b) in the lever is adjustable so that the lever always remains where placed, thereby relieving one from the necessity of holding it continuously if it is so desired. If the small hooks with springs are placed over the air inlets and the lever hook closed, the can may be filled and carried in the instrument bag for days without loss. Thus the dropping can may be filled at the office and carried to a private home ready for use.

The can is so arranged that it is conveniently held (Fig. 3). The operator's right elbow rests on the table beside the patient's head and the can is held in proper