Richter's opinion, are worse than useless. Nothing can be better than mechanical cleansing with a wet brush.

A BRITISH OFFICER'S REPORT ON THE FIGHT AT CHEMULPO.

A long extract from a letter by Captain Lewis Bayly of H.M.S. *Talbot*, dated Feb. 20th, has been published, from which we reproduce (from the *Standard* of April 12th) the following very interesting medical details connected with a naval engagement in modern war:—

In connexion with the engagement between the Russian ships *Varyag* and *Korietz* and the Japanese fleet I beg to inclose the following remarks:—Chaplain Roudneff states that the carrying away of the wounded on stretchers became impossible; several men were carrying them when shot down and only five men altogether were brought down to the doctor below the water-line, while of these five the doctor of the *Varyag* says two were practically dead when they arrived. They have held classes on board the *Varyag* to instruct men in "first aid"; bags of bandages had been served out and the doctor says that some lives were thus saved by being thus treated. The Russian sailors bear their operations wonderfully well. There were 150 men employed on the *Varyag's* upper deck during the action and nearly all the killed and wounded were out of this 150, which is 28 per cent. killed, 45 per cent. wounded. It must not be forgotten that having no gun shields her gun crews were practically unprotected and that shrapnel shell were largely used, to judge by the holes in the boats, funnels, &c. All was quiet in the engine-room, as though they had been at target practice. In one stokehold (they have five with no fore and aft bulkhead) the water came up to the floor of the furnaces but did not get into the other stokeholds.

Further on and at the end of his communication Captain Bayly goes on to add that—

A very great deal of shrapnel must have been fired at the *Varyag*, judging by the round holes, and not much lyddite, for there seems to have been no inconvenience from poisonous gases. Much trouble has been caused to the wounded on account of the pieces of cloth that are constantly being extracted. Many men are wounded with punctures, holes about as large as the top of the little finger, and from a quarter of an inch to half an inch or one inch deep, but with no foreign substance such as iron, &c., being present in the wound, and no sign of scorching round the mouth of the wound.

THE WAR IN THE FAR EAST.

The Japanese Red Cross Society has a roll of between 800,000 and 900,000 members and its organisation leaves little if anything to be desired. Nearly 300 medical men are employed in its service and some 1600 qualified nurses are ready for immediate work in connexion with the war. The two permanent hospital ships of the society have accommodation for 400 patients.

The *Times* states that "200 Canadians who served in South Africa with medical and bearer corps have been engaged by the Japanese Government to serve in the present war in a similar capacity. The Japanese authorities have shown a complete knowledge of Canadian participation in the South African war in the selection they have made."

The executive committee of the Russian Red Cross Society, says the *Novosti*, has received advice from Athens that in the Russian Embassy there many Greek medical men have enrolled their names with the request that they may be sent to the theatre of war to serve in the hospitals.

THE LATE FREDERICK CHARLES STEARN, SURGEON, R.N.

The funeral of Surgeon F. C. Stearn, one of the medical officers of Portsmouth Dockyard, took place on April 6th with full naval honours. The service in the Dockyard church was held by the Rev. Dr. Shone and was attended by Rear-Admiral Henderson and all the Dockyard officers, Flag-Captain Sir R. K. Arbuthnot representing the Commander-in-Chief. Afterwards a procession was formed, headed by a firing party. Then came the band of the Royal Naval Barracks, preceded by a field gun carriage on which was the coffin covered with a Union Jack and bearing the deceased officer's hat and sword. Six surgeons were pall bearers. Carriages with private mourners followed and after them walked a large number of naval and Dockyard officers. The interment was at the Highland-road Cemetery and at the close of the service the usual three volleys were fired over the grave.

NAVAL MEDICAL SUPPLEMENTAL FUND.

At the quarterly meeting of the directors of the Naval Medical Supplemental Fund, held on April 12th, Sir J. N. Dick, K.C.B., being in the chair, the sum of £50 was distributed among the several applicants.

The *Army and Navy Gazette* of April 9th states that Surgeon-General G. J. Evatt, C.B., retired list, A.M.S., has been invited to contest the Fareham Division of Hampshire at the general election in opposition to the sitting member, Mr. A. H. Lee, Civil Lord of the Admiralty.

Correspondence.

"Audi alteram partem."

SYPHONAGE IN THE GREAT INTESTINE.

To the Editors of THE LANCET.

SIRS,—A reference to Dr. R. W. Leftwich's latest work on "Syphonage and Hydraulic Pressure in the Large Intestine" has served to confirm the opinion I formed from the evidence produced in his earlier papers—viz., that he is in error in supposing the great intestine to act as a syphon in man during life. The chief observations on which he bases his theory of syphonage are (putting them in brief) the following:—

1. That a piece of garden hose, bent so as to represent the various curves and segments of the colon, acts as a syphon with substances which are only partially fluid in nature, such as glycerine. The criticism I offer to this observation is that the normal contents of the great intestine are of such a consistency that they cannot be made to flow in a tube even with rigid walls, much less in one with flexible and unequal walls. Further, the curves given by Dr. Leftwich to his artificially constructed colon have no resemblance to the actual flexures of the colon as seen in the human body, either living or dead.

2. That the theory of syphonage offers the only full and satisfactory explanation of the arrangement and fixation of the human great intestine. Unfortunately Dr. Leftwich had no time, as he himself explains, to examine the arrangement in animals allied to man or to consult the literature on this subject, otherwise he would have found that the disposition of the great intestine of man does not differ in principle from that found in other mammals, in which, he is careful to explain, there can be no colic syphonage. It is certainly true amongst genera of primates that the more they are habituated to the upright posture the more firmly is their great intestine fixed to the posterior abdominal wall, but this feature finds a full and satisfactory explanation in the alterations in the respiratory movements of the abdominal viscera and need for greater fixation of the abdominal contents, caused by the change of posture.

3. That the theory of syphonage explains the arrangement of the fibres of the muscular coats of the human colon. The muscular arrangement of the human colon is not peculiar, it is similar to that of all mammals which live on a mixed or vegetable diet and in which the contents of the great intestine are more or less of a solid consistency. The disposition of the longitudinal muscular coat of the colon in tænia is an adaptation for the production of the peculiar peristaltic movements which help in the digestion, absorption, and propulsion of the semi-solid contents of the colon.

4. That the tonicity or contraction of the tænia of the colon can render the walls of that viscus rigid and thus fit it to act as a syphon. No one, so far as I know, has ever denied tonicity to either the longitudinal or circular coat of the colon, but I am unable to conceive that the action of the longitudinal coat can have any effect on the bowel other than to shorten it. The only manner in which the walls of the bowel could be rendered rigid enough to serve as a syphon would be to suppose that the circular fibres of the colon, which alone can alter the lumen, possessed an active power of elongation. Dr. Leftwich, however, in harmony with modern physiological teaching, regards such an action as impossible, but, on the other hand, he refuses to accept physiological evidence of the importance of the peristaltic movements of the great intestine, yet the muscular coat of six inches of the human colon is nearly three times the weight of an equal segment from the small intestine.

The only manner in which the cæcal or colic wall could be rendered rigid enough to serve for syphonage would be to create a negative pressure within the cavity of the abdomen. This effect could be obtained by placing the patients, not in the upright posture, as Dr. Leftwich places them to obtain colic syphonage, but in a head-down posture, for we know that in such a posture the negative pressure within the abdomen is sufficient to cause ballooning of the bladder, vagina, or rectum if the orifices of these viscera be opened. In the upright posture, on the other hand, the intestinal contents are subjected to a pressure of from 10 to 20 millimetres of mercury, the pressure rising three or five millimetres with each expiration, from 20 to 30 millimetres with

each flexion of the trunk, and from 60 to 70 millimetres on attempting to lift a heavy weight from the ground.

I think that Dr. Leftwich will admit that a tube such as the living colon, with its flexible, unresisting walls, with a musculature which can diminish, but cannot enlarge, its lumen, with contents that cannot flow, and which in the upright posture is subjected to a constant and varying positive pressure, cannot act as a syphon.

I am, Sirs, yours faithfully,

London Hospital Medical College, April 9th, 1904. A. KEITH.

THE PROPOSED WAR OFFICE CHANGES AND THEIR BEARING ON THE ARMY MEDICAL SERVICE.

To the Editors of THE LANCET.

SIRS,—Now that the intentions of the War Office Committee are promulgated it is apparent that the further retrogressive step of depriving this medical service of that power of making its wants and suggestions heard through its head which was granted under the pressing and conclusive teaching of the South African war is to be taken, for it is not probable, the trend of the Government being as is shown in the reception of the two former reports, that any modification will be brought about by action in the House of Commons. To speak of the proposed arrangement as "strengthening the status and power of the head of the medical services" will seem to many as wanting in cogency when viewed by the past and as unreasonable to those who have actual personal knowledge of the matter in question. Experience indicates very clearly that the present step is but an additional one in the downward course and that it requires but a few army orders to bring the medical service into the old unsatisfactory subjection in which it was in the days of its degradation and to reduce its influence in army well-being to the standpoint thought sufficient by the military official occupying the post of adjutant-general in the Army Council.

Well, Sirs, I do not propose to repeat any of the excellent observations you have made on this subject in your leading article of April 2nd (p. 943), but to ask space to make a few further and last remarks on three practical points which are embodied in the War Office Committee's decisions.

1. By making the medical service one of a group of departments under the adjutant-general its director-general becomes one of his subordinate officials. All communications, proposals, and recommendations emanating from it will go to him and with him will reside the power of giving expression to them or not, of deciding for or against them. He will stand between the medical service and the higher State officials, the controlling voice of its needs and wishes. The adjutant-general may be younger in years of army service and experience than the director-general and of less army rank, it is certain that he cannot have the same professional and technical knowledge; he is apparently to be changed every few years—a detail not making for continuity in aim and practice—and yet into his hands are to be given the supervision and control of a professional and scientific body of men with whom rests in no small degree the well-being of the army in peace and war. On a business basis, does such a proposal commend itself? How, under such an arrangement, can any honest and true responsibility be assessed for future untoward results such as the past has revealed?

2. On the statement in a former report of the committee to the effect that the selection of officers serving under them would be left to the respective heads of the Army Council presumably the selection to the post of director-general, left by Mr. Brodrick's scheme in the hands of the Commander-in-Chief and the Advisory Board, will fall to the adjutant-general. In the light of the past does the placing of such an important post at the discretion of this official suggest itself as desirable or making for efficiency? The bad points of the old system—favouritism, absence of guarantee of advancement of the best man, the necessity of being a *persona grata*—have every opportunity for being reproduced.

3. The one reason advanced for placing the director-general (and so the department) under the adjutant-general is that "sanitation in peace and war is closely bound up with discipline," a view with which many will be in agreement so far as observance of the rules, enforced if necessary by

punishment, is essential for success, yet beyond this limited range its bearing on the course taken is not apparent. But be the validity of their conclusion what it may it surely was no less recognisable by the military advisers of the late Secretary of State for War when they took the important step now apparently to be retraced than to the three heterogeneous members of the present committee only one of whom is a military man. Discipline, however, in the army is virtually vested in the combatant branch (with a very limited exception)—commanding and company officers, and the enforcement of this principle in its completeness will relegate this technical and important duty of sanitary control to those who already, especially in war, have sufficiently onerous work and who have not the necessary knowledge and training to guide them in its performance. The Crimean commission, basing its conclusion on the vast importance of sanitation to the army, enforced the necessity of placing "the medical officer in the position to which the dignity of his profession and the great services he renders justly entitle him" for assuring "to his advice and opinion that weight and influence in the administration of the army which are necessary to secure the health and to maintain the efficiency of the troops" by, among other important steps, requiring that "medical officers were to be invariably consulted in all matters affecting the health of the soldier in barracks." The committee of 1904 also make this branch of scientific knowledge its apparent ground of action but inverting the procedure previously thought essential reduce it to a question of discipline, subordinate the professional head of the medical service to the combatant section of the War Council, and only summon him "whenever his advice and special knowledge are required," the Council deciding when this is necessary; precisely the line of action which the military authorities took in the past when by army orders and practice they reduced to a nullity all the valuable proposals which the Crimean commission thought necessary for army efficiency and the action based thereon. The committee points out that the Royal Army Medical Corps "exists to serve the army in a most important capacity" in support of the line it takes, but granting that it cannot be independent of all higher military authority yet on this basis it results, its duties being so dissimilar to those of the other sections generally, that it must have a freedom to express its wants and a freedom to act untrammelled by other officials not versed in its particular professional requirements and especially by some possible higher one holding the views of a former adjutant-general on sanitation as "a fad."

From the Crimean war downwards (possibly even previously) one dominant feature stands out conspicuously—an inability on the part of the combatant section to comprehend the aim and scope of the medical service, to sympathise with its wishes, or to assist it in its duties. The steps towards improvement hitherto taken have been obtained in spite of it and mainly by outside help, with the result that no opportunity has been lost to neutralise the advantages gained, and the recent experience has been but an instance in point. The trend of medico-military affairs being as they are it behoves the aspirants to this service to note well the object lesson passing under their eyes, the instability of the conditions under which they will exercise their professional career, and to weigh carefully all their circumstances before embarking on a course which has proved anything but satisfactory to many of their predecessors.

I am, Sirs, yours faithfully,

FRANCIS H. WELCH,

Surgeon-Colonel (retired), M.S.

Lee, April 9th, 1904.

THE "N" RAYS AS A PROOF OF DEATH.

To the Editors of THE LANCET.

SIRS,—As the living body emits "n" and "n₁" rays (of Blondlot) from the brain, spinal cord, heart, muscles, &c., may it not be worth while trying whether this fact will serve as a simple test for death? The rays are revealed to the eye by their effect in brightening ("n") or dulling ("n₁") the phosphorescence of sulphide of calcium.

I am, Sirs, yours faithfully,

Croydon, April 6th, 1904.

JOHN MUNRO.

* * Professor Blondlot's experiments do not appear to have been confirmed in this country but we publish this note because of the interesting suggestiveness.—ED. L.