within the period of his leave. Captain A. D. White has been appointed as a specialist in advanced operative surgery, 8th (Lucknow) Division.

SPECIAL RESERVE OF OFFICERS.

Royal Army Medical Corps.

Supplementary List: The undermentioned to be Lieutenants (on probation): George Rollason (dated Oct. 25th, 1909) and John Fraser (dated Nov. 1st, 1909).

TERRITORIAL FORCE.

Royal Army Medical Corps.

3rd North Midland Field Ambulance: Lieutenant George J. S. Atkinson resigns his commission (dated Oct. 23rd, 1909).

Attached to Units other than Medical Units.—Captain James H. Hunter resigns his commission (dated Oct. 15th, 1909).

HONORARY SURGEON TO THE KING.

Surgeon-General William L. Gubbins, C.B., M.V.O., Deputy Director-General, Army Medical Service, has been appointed an Honorary Surgeon to the King, vice Brigade Surgeon-Lieutenant-Colonel and Brevet Colonel C. E. Harrison, C.V.O., retired.

THE SECUNDERABAD GARRISON.

The Secunderabad correspondent of the *Pioneer* of Oct. 29th states that "There left by Calcutta mail to-day Lieutenant-Colonel E. Butt, R.A.M.C., who has just vacated the senior medical officership of Secunderabad station hospital on promotion as P.M.O. Calcutta. Colonel Butt has only been a few months in Secunderabad, but in that time he has accomplished some remarkable improvements in sanitation and reduced to a minimum diseases which for years have been very prevalent in the garrison here. The garrison is, in fact, in a healthier condition than ever it has been before. Whereas the prevalence of enteric fever had baffled the skill of many of his clever predecessors, there have only been three cases since Colonel Butt's advent. The remarkable declination in disease is due to Colonel Butt's method of going to the root of sanitary evils, and although the troops were at first inclined to resent the rigorous measures adopted, all admit now that his methods have had a miraculous effect. Colonel Butt was the recipient of many farewell dinners, and his departure is much regretted."

THE ARMY AND NAVY MALE NURSES' COÖPERATION.

The second annual meeting of the Army and Navy Male Nurses' Coöperation, of which Her Majesty the Queen is patroness, was held at the Grafton Galleries, Piccadilly, on Nov. 29th, when Princess Louise, Duchess of Argyll, who was accompanied by the Duke of Argyll, was present. Sir William H. Allchin, in presenting the annual report, said that very satisfactory progress had been made during the year. The number of cases nursed was 300, being an increase of 108 over the previous year. The great progress that had been made was due in a large measure to the sympathetic attitude of the medical profession, and he hoped that the coöperation would soon be placed on a self-supporting basis. The Queen had shown her practical sympathy by sending a donation of £100. The War Office and the Admiralty had also greatly assisted the movement. The honour of founding the society belonged to Miss Ethel McCaul, aided by Sir Frederick Treves, and the coöperation of the heads of the medical departments of the navy and the army had enabled the committee to supply the public with suitable and reliable male nurses. The Duke of Argyll expressed the great interest which the Princess took in the work, and remarked on the necessity of preventing men who had obtained good nursing experience from drifting into the ranks of the unemployed. Colonel Sir Edward Ward, in the unavoidable absence of Sir Alfred Keogh, Director-General of the Army Medical Service, thanked Her Royal Highness for her interest in the work of male nurses, and said that Mr. Haldane and his colleagues at the War Office were deeply interested in the movement. Inspector-General J. Porter, the Director-General of the Medical Department of the Royal Navy, who followed, said that the nurses trained in the navy were second to none. He hoped that the coöperation would soon have three or four hundred nurses, who as reserve men would be able to help the country in time of need.

Correspondence.

"Audi alteram partem."

STATUS LYMPHATICUS.

To the Editor of THE LANCET.

SIR,—My services, as a medical expert witness, having been requisitioned by Messrs. McKenna and Co., solicitors for Messrs. Harrods, Limited, who were instructed to defend the case of *Rex v. Clarke and Eardley re the sudden death of Miss Helenora Catherine Horn-Elphinstone Dalrymple* while undergoing a dry shampoo with carbon tetrachloride on July 12th, 1909, and the case for the prosecution having now been withdrawn after a protracted hearing, for certain reasons to follow, I find myself prompted to write this letter for publication. The objects of such a prosecution are, of course, not a matter for me, and I only desire to deal with the case from a medical point of view. With regard to the danger of the use of carbon tetrachloride there can be no question about this or about the inadvisability of such "shampooing" being administered to any member of the public who likes to ask for it, but, in the particular case in point, had the defence been heard, I think it would have served to bring home a very important object-lesson to the medical profession—namely, that the status lymphaticus problem is a much more serious one than the majority suppose. It seems apparent to me and to others that the prosecution in furthering its objects lost sight of the all-important status lymphaticus factor. True, these desirable objects may have been attained and a warning note sounded to the hair-dressing trade, but this has, in my opinion, only been accomplished by practically overlooking the "real" cause of death—namely, lymphatism.

Doubtless there are cases in which people have been convicted of very serious charges when, in fact, death was due to this disease, and a number of cases are on record where nursemaids or relatives have been charged with suffocating or fatally maltreating children, the true cause of death found at the necropsy being lymphatism. The presence post mortem of the typical pathological picture of the disease justly should be *primâ-facië* evidence of death from natural cases. In these days of deaths under anæsthetics the investigation of the disease is of the utmost importance, and I feel thoroughly convinced that if a Royal Commission should be appointed, as has been mooted, for the investigation of the subject, the status lymphaticus problem will be found to be one of the most important it will have to contend with. As it is, when one of these unfortunate tragedies occurs in the practice of a medical man with limited experience aspersions are sometimes cast on his professional capabilities, and probably an irreparable stain on his character results. For over three years now I have constantly given a great deal of thought to the subject. Very little is written or known about the disease, but on every possible occasion I have gathered all the information I could. Having personally met with six cases of sudden death from it in two and a half years, and in most of these instances having myself known and physically examined the subjects during life and made the post-mortem examinations after death, I have been able to draw certain deductions. I wrote a paper on the subject which was published in *THE LANCET* of Dec. 26th, 1908, and Jan. 9th, 1909, headed "Clinical and Post-mortem Observations on the Status Lymphaticus, with Deductions, and a Plea against the Maligning of Ethyl Chloride as a General Anæsthetic," and also another article to the *Journal of the Medico-Psychological Association* entitled "The Clinical and Post-mortem Aspects of the Status Lymphaticus," which was published in their quarterly journal of July, 1909. Notes, both before and after death, of all six cases are fully reported in these papers. The existence of the status lymphaticus undoubtedly in large measure accounts for the partial disrepute into which ethyl chloride has temporarily fallen, and its existence, too, has in certain circumstances brought ill-repute to a practice of such national importance as vaccination. I have known of such cases. For these reasons, also, it is a great pity that the status lymphaticus factor in "the fatal shampoo case" should not have been more fully discussed. I quite recognise the

raison d'être of the prosecution, but I cannot help thinking that on the all-important medical point above alluded to the evidence was misconceived, and this is one of the principal reasons which prompt me to write this letter; and here again I would like to emphasise the fact that it is to be construed in nowise controverting the undisputed toxicity of commercial carbon tetrachloride.

The question was, "What was, very roughly, likely to have been the actual volume of vapour given off and remaining in the cubicle at Messrs. Harrods at the time when Miss Dalrymple was being shampooed?" And this would depend mainly upon five factors—viz., (1) the area of evaporating surface; (2) the temperature of the room; (3) the velocity, direction, and area covered by the evaporating draught; (4) the size and position of the exits for escape of the vapour; and (5) the time during which evaporation was taking place. Professor Pepper stated in his evidence that "he thought death was due partly to the heart and partly to the respiration, partly by the carbon tetrachloride acting as a poison on the heart, and partly by its effect on respiration." From the latter half of this opinion my convictions compel me to dissent, and I mention the fact because there is no disease of greater medico-legal importance than the status lymphaticus. In the case in question there was reasonable evidence to show that Miss Dalrymple's life was extinct before she was laid on the floor. The sequence of events at the catastrophe and even the post-mortem facts, as recorded at the inquest, strongly support such a view. I do not believe that Miss Dalrymple could have breathed any carbon tetrachloride vapour, and when making such a definite statement I at least feel that I have substantial reasons for doing so. I would like it to be clearly understood, too, that my purpose in attempting to prove this, and that Miss Dalrymple's death was due entirely to lymphatism plus the effect of shock, is ostensibly for the sole object of drawing attention to this ill-understood disease instead of otherwise allowing it to receive another set-back.

On Tuesday, Sept. 21st, I made certain experiments at Messrs. Harrods, Limited, in the room in which, I understand, Miss Dalrymple's death took place. In one experiment I requested that Miss Beatrice Clarke should have her hair dry-shampooed with tetrachloride in my presence, and that everything should be arranged and done exactly as it was in Miss Dalrymple's case. I particularly noticed the moment the vapour reached Miss Clarke's nose and mouth, and to achieve this end I kept my nose just in front of Miss Clarke's nose and mouth for the first four or five minutes, until the whole of 16 ounces of the carbon tetrachloride solution had been used, and the shampooing process practically completed. I was satisfied that I could detect no trace of tetrachloride vapour for the first three or four minutes at least, and that none could have reached Miss Clarke's face during this period—i.e., till the whole of the 16 ounces had been used—and I was prepared to state this fact on my sworn testimony. After this period, and if the door of the cubicle was closed, it was possible, and indeed most probable, that some of the vapour would reach the face of the person being shampooed (for quite explicable reasons), but this is entirely another matter. The ventilation of the actual cubicle was excellent. The fan used for the purpose of blowing the tetrachloride fumes away from the face of the person being shampooed was situated on her left side front, and the cylindrical tube, through which the blast of air was fired, was of about 3 inches in diameter, the nozzle of which would be approximately $3\frac{1}{2}$ feet distant from the face of the person being operated upon and its direction in adjusted alignment with her head and the open door of the cubicle a few feet beyond. As the area covered by the current at $3\frac{1}{2}$ feet forms a circle of just over a foot in diameter, and which circle coincides with the face, it is impossible to conceive how the vapour could fight its way in the teeth of such a gale, and get from the back of the head to the front of the face, not even from the hair just over the forehead, since in the shampooing position the latter is in a plane posterior to that of the nose and mouth. I understand that carbon tetrachloride was being used in numerous ladies' hairdressing establishments all over London, and in many instances where nothing like such elaborate precautions obtained.

On my interrogation of Miss Beatrice Clarke I elicited from her that the sequence of events at the tragic catastrophe, as she observed them, was as follows. The first

thing that Miss Clarke noticed was Miss Dalrymple's hands falling limply from her face. This occurred approximately about one to two minutes only¹ after commencing to pour the solution on her hair, and when about 4 ounces only of the tetrachloride solution had been used. Miss Dalrymple was at the time holding a small towel over her forehead, and this of course, falling with her hands, disclosed the next thing which Miss Clarke noticed in the looking-glass opposite them both—namely, that Miss Dalrymple was looking very pale. Miss Dalrymple had previously looked rather pale, but her pallor was much increased. Miss Clarke states that almost immediately after this observation the pallor suddenly became extreme, and Miss Dalrymple's head and body at the same time fell forwards. Miss Clarke at once tried to steady her, but found that she was unable to do this owing to Miss Dalrymple's general and very marked limpness, and it was at this stage that Miss Clarke became alarmed. Being unable to prop her up, she laid her on the floor and ran out of the cubicle for assistance. Miss Clarke hurried back in a comparatively few seconds, and then noticed a dusky leaden blueness about the face, and Miss Clarke further volunteered that this peculiar blueness was more noticeable at the back of the neck—Miss Dalrymple was at the time laid on her back. Miss Clarke neither saw nor heard any breathing movements, and did not notice whether the pupils of Miss Dalrymple's eyes were either large or small, nor does she know whether her eyes were light or dark. Miss Clarke states that prior to commencing the shampooing process she informed Miss Dalrymple that the fumes might make her feel a little faint.

Now, from such a sequence of events, and also from the post-mortem notes, as recorded at the inquest, I firmly contend that Miss Dalrymple was dead before her body was laid on the floor, and that she could not have breathed any carbon tetrachloride fumes. My reasons are the following. The first ominous signs were noticed approximately "one to two minutes" after commencing the shampoo process, when about "four ounces only" of the solution had been poured on the hair. Also, I understand, the door of the cubicle was open at the time, and in which circumstance the greater part of the vapour would be blown on and out of this doorway. The sequence of events indicates a "quasi-acute" case of lymphatism and one in which both cardiac and respiratory functions must have ceased practically simultaneously, and it does this: 1. Because of the great rapidity with which the ominous signs succeeded one another. 2. Because sudden and extreme pallor was the first and most striking feature of the fatal termination and not cyanosis—which would have indicated that the respiratory centre was being affected either before or to a greater extent than the cardiac centre; and it is in the first-mentioned condition—i.e., when both cardiac and respiratory centres are seized suddenly and simultaneously or when the cardiac centre is either affected first or to a greater extent than the respiratory centre—that death is so very sudden. 3. Because a blue discolouration became evident the moment Miss Dalrymple's body was laid on the floor, consequently it supervened very quickly and became more noticeable in the face when in the recumbent posture. 4. Because the "blueness" was a dusky-leadened blueness and more noticeable at the back of the neck, possibly from hypostasis. 5. Because of the extremely marked degree of flaccidity that very suddenly and very rapidly manifested itself. 6. Because no audible or visible respiratory gasps were noticed. 7. Because Miss Dalrymple's sudden death is perfectly comparable with three other quasi-acute cases of my own observation—reported fully in *THE LANCET* and *Journal of Mental Science*—in which death was equally sudden, the exciting causes equally insignificant, and in which the necropsy disclosed pathological changes such as are consistent with lymphatism and lymphatism only.

The post-mortem facts, as recorded at the inquest, indicate the same: 1. Because rigor mortis was chiefly present in the lower extremities, suggesting a sudden death in which the muscles of the legs, which had probably been most exercised just before the fatality, were being chiefly affected. 2. Because there was a livid discolouration of the face and head, indicating sudden death, and probably the same lividity that was becoming evidenced even while on the floor at Messrs. Harrods' hair-dressing department. 3. Because the heart cavities were dilated and the muscle degenerated, also because the arteries of the heart were very narrow,

¹ Depositions say, "Hardly two minutes, I should think."

indicating a well-marked or quasi-acute case of lymphatism, and one in which both respiratory and cardiac centres are usually affected suddenly and more or less synchronously, with the inevitable result, sudden death. 4. Because the kidneys were a little congested, to me another indication of a quasi-acute example of the status lymphaticus. 5. Because the lungs were congested—a point that I have commented on before in such cases of sudden death from lymphatism.

At the inquest no notes were recorded as to whether the glands in the mesentery were dark or pale pink in colour; whether they were uniformly large or uniformly small; whether there was or was not any general enlargement of the smaller peripheral mesenteric glands; and whether some groups of glands were larger and paler than others. Also the condition of the milary lymphatics in the stomach, œsophagus, and intestines was not recorded. All these points might possibly have thrown further light on the case. The cavities of the heart presumably did not contain any noticeable quantity of blood, since no mention is made that they did, and I consequently surmise that it is not improbable that its action ceased during systole, as it usually does in such cases. In THE LANCET of Dec. 26th, 1908, I drew attention to the fact that of deaths occurring while under general anæsthetics from the status lymphaticus the catastrophes always happened during light anæsthesia, either before reaching, or on recovery from, the third stage of narcosis. In some instances where chloroform has been administered for an hour or more during a protracted operation, although no untoward symptoms may have been present at any time during the whole of the administration, nevertheless, just as the patient is beginning to come round and the last few skin sutures are being inserted he may suddenly die.

From this, and also in consideration of the extremely trivial firing-off causes that may be sufficient to give rise to a fulminating termination resulting in sudden death, I argue that the effects of shock in such cases are probably of more importance than the effect of the narcotic. In Miss Dalrymple's case, shock, caused by cognisance of the fear that she might feel faint, subsequently reinforced by the shock of the cold lotion applied to her head, would be, at a coincidently critical period, quite a potent enough exciting cause of sudden death. In conclusion, I was sorry that both Miss Dalrymple's former medical attendant and the coroner's jury should have attributed this sad and unfortunate disaster to "Death from misadventure," when surely the true verdict should have been one of "Death from natural causes."

Since writing the above I have read with great interest the letter of Dr. Donald J. Munro published in THE LANCET of Nov. 13th (p. 1468), and I would here like to take the opportunity of endorsing many of his views. For practical purposes the first point of paramount importance is the question of diagnosis, and in this connexion may I be allowed to suggest some modifications of Dr. Munro's restrictions of the term "status lymphaticus"? In my opinion the five following physical signs and symptoms are the most important and are arranged in order of merit. 1. Signs of a persistent thymus gland as evidenced by a lowering of the upper border of superficial cardiac dulness in the absence of emphysema of the lungs, or old tuberculous cavities at its bases, with or without fulness of the episternal notch, and *not by a dulness to percussion* behind the manubrium. This region may even be a little hyper-resonant, and if dulness is present it is probably due to some new growth, and *not to a simple hyperplasia of the thymus gland*. 2. An uniform prominence of all the papillæ of the tongue, especially the circumvallate papillæ, between which and the epiglottis posteriorly there is frequently present a great multiplication, hypertrophy, and hyperplasia of all the lymphatic nodules, giving rise to a very characteristic picture, many of these sessile nodules measuring about 1-8th to 3-16ths of an inch in diameter at their bases; the condition cannot be seen without the aid of forehead and laryngoscopic mirrors. 3. A symmetrical enlargement of the thyroid gland. 4. Distant and muffled heart sounds, with absence of the sharply defined click caused by closure of the valves, associated with a soft, weak, and ill-sustained pulse, and, as Dr. Munro states, often abnormally slow and inexcitable. 5. A greater or less amount of hyperplasia of any or all of the faucial, pharyngeal, and lingual tonsils, also of the uvula, and the presence of adenoid growths in either very small or

large quantities. Either or both the liver and spleen may, or may not, be enlarged, and to such a variable extent that no reliance can be placed on the absence of physical signs of enlargement, and very little indeed on the presence of the same. The pupils of the eyes also may appear rather dilated. The co-existence of 1 and 2 is pathognomonic of the disease.

Lastly, I cannot agree with Dr. Munro when he says, "No clinical observation has ever been so hopelessly mistaken as that which stated that pregnancy conferred immunity from the poisonous effects of chloroform." True, there are here more factors than one tending to produce an overdose of the vapour, but the anæsthetist is prepared for this. Despite the mechanical embarrassment to respiration, as Dr. Munro says, the heart is stronger than normal, and the increased carrying capacity of the red blood corpuscle I would regard as a "virtue" rather than a "vice." This factor, coupled with the toxæmia from over-metabolism, probably in large measure accounts for the reason that so little chloroform is necessary to produce and maintain an efficient *and safe* anæsthesia during parturition. Is it not sometimes advisable to artificially produce a toxæmia by giving a hypodermic injection of morphine preparatory to the administration of chloroform? Probably if one had to maintain surgical anæsthesia or the third stage of narcosis during parturition it would not be as safe as it would be apart from the condition, but surely "light" anæsthesia is much safer at such a time than it is at any other.

I am, Sir, yours faithfully,

R. ERNEST HUMPHRY, M.R.C.S. Eng.,
L.R.C.P. Lond.

Northwood, Middlesex, Nov. 15th, 1909.

CIVILISATION AND THE CORSET.

To the Editor of THE LANCET.

SIR,—May I correct an impression which Mr. Heather Bigg conveys in his communication on the above subject? He seems to think that men in "sultry and atonic countries"—I wonder what he means by an atonic country?—"gird the loins" with a view of supporting nature's "incompetent abdominal walls." Some years ago I unexpectedly met in Calcutta a very distinguished London surgeon, an old fellow-student, who was spending his summer holiday in going to India to personally see a thing of which he heard in connexion with native customs; if Mr. Bigg would follow that example he would see personally that "girding of the loins" has nothing whatever to do with artificial support. He need not go beyond Aden, where he will see the Arab camel-drivers coming in from the desert, among whom he will see magnificent specimens of activity. "Girding of the loins" really means girding of the loin cloth, which is wrapped round the body, passed through the legs, and tucked in *at the waist*, and is no more worn for the purpose of support than our trousers are so worn; nor, if it were conceivably the object, could it be obtained in any better degree than by our trousers. It is obvious that the cloth is liable to work loose, being only tucked in, and "girding of the loins" means readjusting it and tucking it in again, and the object corresponds to our object in wearing braces. Natives of India, whether fighting as uniformed Sepoys or in their native garb, Britishers, whether fighting or engaging in friendly contests, do not wear, and do not need, any artificial support. I do not wish to contend for or against the use of corsets, the women will settle that for themselves apart from contradictory statements and opinions of the profession, but I do wish to correct an impression which may mislead others in supposing that in a country like India—if Mr. Bigg calls that an atonic country, and a visit there will correct him on that point—men have to wear artificial support for their loins and abdomens. The impression might lead to the thought that it is necessary in this country, though not among those accustomed to, or knowing anything about, exercise. Fancy a Marathon runner running in an abdominal belt!

In conclusion, I may go one point further and say that which is demonstrable—namely, that where the natural muscular support of the loins and abdomen is deficient from want of tone, the best way of preventing recovery of tone is to provide artificial support, and in no cases is this so lamentably obvious as in the indiscriminate ordering of