Fletchy dear,

It might interest you to hear a little about our impressions of the German medical treatment of their wounded. There are impressive differences from our system and results; and the latter should give comfort and pride to Americans in their Army Medical Corps. Having seen the British (albeit superficially), and now the German methods, I am glad I am a doctor in Uncle's Army.

This hospital is a General Hospital for the Luftwaffe. It is composed of a group of small hotel resorts which existed before the war in this little Spa. There are many similar such units in the neighboring area. There buildings were taken over by the Govt. and welded into a physical unit. The buildings are fair to good. There was not much over-crowding of patients. The equipment was adequate. It is staffed by Wehrmacht doctors. The commanding officer is a Major. The chiefs of services, Medical, ENT, Surgical, and Dental are Captains. Some of the ward doctors are rated as Sergeants boys just finishing, or just having finished their medical degrees. The equivalent ranks of these jobs in our army would be Eagle Colonel. Lt. Colonels, or Majors, and Captains, in the order named. Some German doctors enter the army as privates. You can see their whole rank schedule is disproportionately low. This is bad for two reasons: it places the medical corps at a distinct disadvantage when operating with live units; it fails to aid the doctor to retain the prestige so necessary to patient confidence and the maintenance of discipline. There are some old army sergeants of the medical corps here doing administrative jobs, who outrank the ward doctor. The personal capacity of the individuals professionally seems good. They have the attitude of doctors, as far as we can judge. The medical chief studies his patients well, and knows them thoroughly. The charts are well kept. He practices, as far as I can judge, good medicine. The surgical chief is an assistant professor of surgery from Cologne. (Such a man would have entered our army as a Lt. Colonel). He has had wide surgical experience, and represents, I imagine, the better levers of German surgical hierarchy. They are all well-read and informed as to the literature - (German, of course. American & British medical literature since the War has apparently been unavailable to them). (As theirs has to us.)

The patients were and are well-fed. Most medicines are available. The nursing seems good.

This, then, is a well-ordered hospital, and represents the best quality that the Germans had. What do we find are their actual results? In this regard I refer only to the wounded patients, not to their medically ill, for of these I cannot judge.

The first and most overwhelming impression is that they have an immense amount of infection in their wounds. Almost all patients have chronic wound or bone infection. We asked them this question - "How many extremity wounds do you expect will get infected?" Their answer, "Every deep wound gets infected." This to us is a terrible

indictment! Although accurate figures are not available, at least to us, the consensus of opinion of John Hustin, Cort. Mitchell and myself was that somewhere between 10 and 15% of our extremity wounds (of all types) became infected. For us, the normal course to be expected, for a deep, compound wound is: wound -- early surgery (wd. left open) treatment of underlying bone injury -- complete or partial functional recovery. Their injuries seem to go: wound -- delridement (?early)-- (wds often closed & drained)-- infection -- treatment of chronic osteomyelitis (-- and/or drastic surgery to save life from overwhelming infection)-- reconstructive operations to restore some function (or amputation to speed rehabilitation).

What a difference! And why it is we cannot be sure. In the first place, they have no penicillin. But even the it is a powerful therapeutic and prophylactic drug, we didn't have it in the early Pacific or the African campaigns, and there our infection rates were low. They don't use sulfa by mouth to be taken at the time of wounding by the soldier, nor do they use it routinely for the first few days in all cases. But many a G. I. fails to take his pills, or can't get at them, or has a belly wound and isn't supposed to, and he doesn't get infected!

I suspect it is our emphasis on early (and adequate) surgical treatment. The Krauts (and also the British) made a practise of operating only the most seriously wounded in advance hospitals; the vast majority underwent long evacuation to rear areas before receiving treatment. If there was, as there often is, tie-up in transportation, or if casualty numbers over-stretched their facilities, there may have been a delay of days before a man was first treated definitively. Perhaps their ideas of adequate delridement were unequal to ours; perhaps their immobilization techniques were less good; perhaps, or rather no doubt, their tendency toward wound closure, with tube drainage, contributed significantly to this terrible infection rate. Whatever it was, the proof of the pudding is in the eating, and here, if ever there was any, is brazing confirmation of our basic war-medicine concepts and justification of our system. Here is the reason we have field hospitals operating 2 -- 4 miles behind the lines; evac. hospitals, in large numbers, 6 - 25 miles behind the lines. This is why our medics brave the dangers of shellfire and ambulance drivers run the gamut of no-man's land day and night to get them back quickly.

The ideal medical treatment of war wounded would be if one second after a man is hit a complete surgical theatre and ward could suddenly appear at his side, and he were operated at once. The nearness that one can, in practise, approach this theoretical ideal is the measure of achievement and success. One must bring the surgeon to the nearest point that he can satisfactorily work. One must have a philosophy of swift, intelligent first-aid & immobilization, and then quick evacuation to treatment.

This is the single most important concept that this war has proven: early surgery is the keystone of war casualty treatment.

How do some of their mortality statistics compare with ours? These figures were quoted proudly by the chief surgeon here as evidently to be considered good. I will give our rough figures to compare:

Chest wounds - German - 40% (90% progress to empyema)

U.S. - 10 - 20% (10 - 15% progress to empyema)

Thoraco-abdominal - 90%

U.S. 30%

Abdominal - 35%

U.S. 10%

Compound femurs - 15 - 20%

One other factor enters here: our superior organization to combat shock. The Germans used blood transfusion, but not routinely or with adequate amounts. They had no plasma units. Thinking back on so many hundreds of boys I've seen where these meant life, and their absence, death. I realize once more the wonders of life-saving which is represented by our blood bank and plasma pool.

Because of the frequency of wound, and hence bone, infection, the Germans have been forced into some drastic surgical positions. Take compound knees, for example. Hauptmann Witteler thinks of knees as follows: "any injury to the knee joint itself with much bone or capsule injury will always become a septic joint. If I am lucky, and the infection is "not serious", I can excise the knee, and ankylose the femur to the fibia. If the infection is "very serious", I will amputate to save his life!" He told us that 30% of the many amputations in Germany were because of septic knees! What American surgeon has ever seen one amputation for septic knee? The best they have to offer is excision of the knee-joint (an operation few American surgeons have even heard of), which, if they are lucky, gives a stiff leg, 2 inches shorter than the other. John Huston, an orthopedic surgeon here with me, and who has had extensive experience in our own General Hospitals, is amazed and appalled at these results. On the other hand, the German Captain is amazed and utterly incredulous when we tell him what we expect, even of a badly-shattered knee. He thinks we are either liars or else we never sawaany war wounds.

I have seemed to deprecate their medicine, and indeed, in comparison, it stands in a poor light. This does not mean that their surgery is necessarily poor. Some of it is clever; some new and interesting. For example, we have seen Witteler do two patients with the marrow-cavity pinning technique of internal fixation, which caused such a furor when we first saw such patients recaptured a few months ago.

(Even <u>Time</u> printed a picture of the X-Ray of such a patient). It is a technique with <u>aims</u> similar to our Stoder splint or Roger-Anderson fixation, but an entirely new, and probably superior method. Developed by a young surgeon in Kiel: Kunsterer. I suspect it may have wide post-war application in America. They have an excellent electric foreign-body locallizer. They have good instruments, needles, etc.

Where they have fallen short is, apparently, in their total attitude about the importance of their medical corps, which they value much lower than we. The relative number of hospitals, front-line units, evacuation units, etc. is much fewer than ours. They failed to establish a national blood bank and secure blood & plasma. They failed to seize our penicillin and begin production (though detailed descriptions of mass methods have appeared in our public medical journals). They relegated their medical corps to a minor position in the Army, and withheld rank, authority, and prestige. Thus the professional men were forced to work under definite disadvantages. And on top of that, because of their expulsion or slaughter of their Jewish or liberal doctors, they suffered a definite doctor shortage. (We have more doctors in our Army than they have in all of Germany!)

No doubt we have spent two, or perhaps even ten dollars to their one on our medical corps. But looking at the results in terms of men returned to duty, lives saved, disability minimized, I think the people of America can say to themselves—"it was well worth every penny." I am proud to be a member of it.

Well, sweet, that turned into quite a tome. It has perhaps, more interest to Docs than to anyone else. Next letter I write, I'll try to tell you a little about our daily routine, (which is far from arduous) and about life here in general. Meanwhile, darling, everything is marking time until I can find out what my future holds.

张 张 张 张 张