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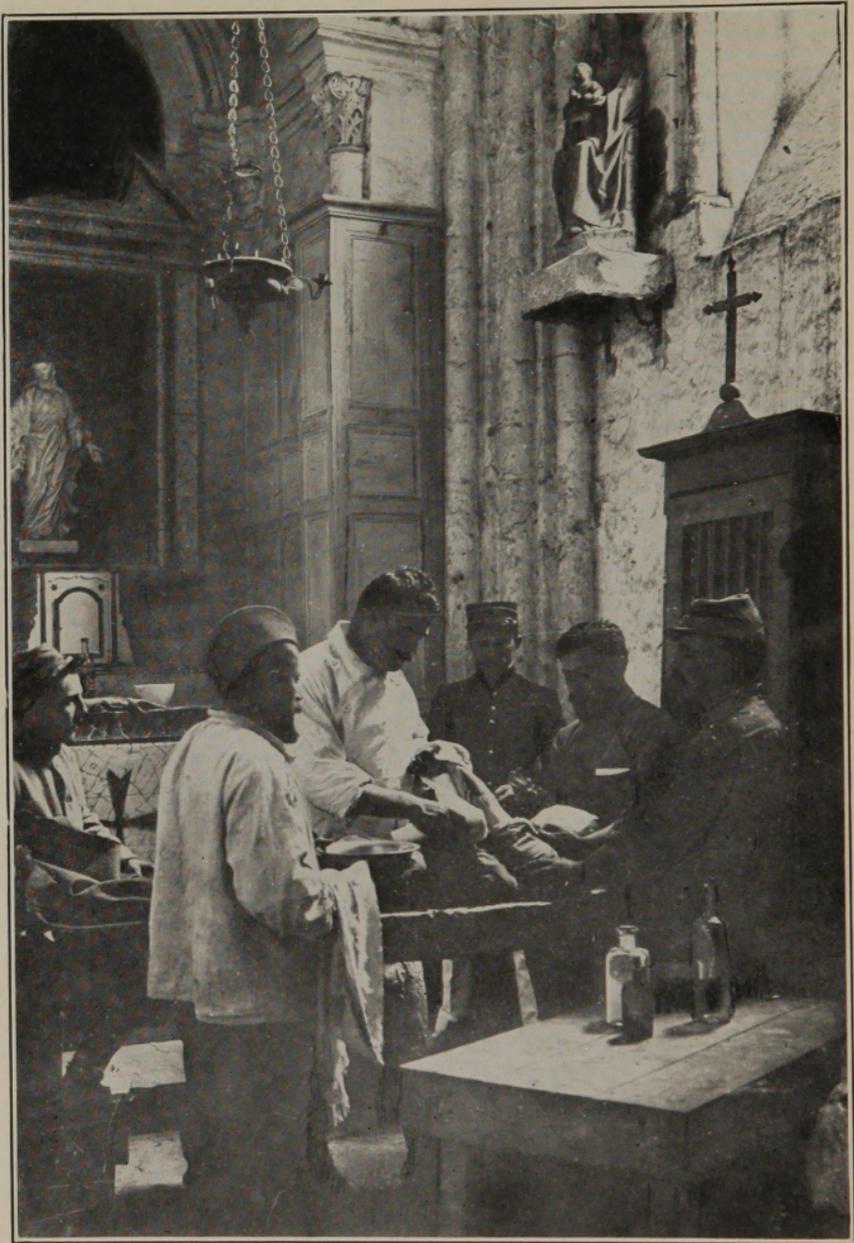
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THE DOCTOR'S PART



FIRST AID POST IN A CHURCH

THE DOCTOR'S PART

WHAT HAPPENS TO THE WOUNDED IN WAR

BY

JAMES ROBB CHURCH, A.M., M.D.

COLONEL MEDICAL CORPS, U. S. ARMY

WITH FOREWORD BY

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SURGEON-GENERAL, U. S. ARMY



ILLUSTRATED



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FOREWORD

These impressions of a Military Observer are the results of over two years spent by Colonel Church on the Western front as an Observer with our Allies and later on the Staff of the Commanding General of the American Expeditionary Force.

His service of twenty years in our army, including duty on the Mexican border and with the First United States Volunteer Cavalry (Rough Riders), in the war with Spain where he won the Medal of Honor for gallantry under fire, well qualifies him for this important duty.

The author has presented in non-technical language much information which will be of value to Medical and line officers as they go abroad on active duty with troops in France.

The book will also be read with interest by the laity as Colonel Church has the happy faculty of presenting the human side of his experiences in an interesting manner.

He has given us a glimpse of certain side lights of the great war not heretofore available.

W. C. GORGAS,
Surgeon General,
U. S. Army.

July 1, 1918.
Washington, D. C.

PREFACE

So much has already been written in regard to the present war that any one who essays to add to the sum total cannot help but wonder if there is anything left unexpressed by those who have gone before him.

The inclination to describe the many complex phases which enter into modern conflict is perhaps natural. There are two passions which are, have always been, of paramount interest to mankind. Kipling voices this when he says, "Two things greater than all things are, the first is love, the second is war." And so I fancy that each individual who has been given the opportunity to view with his own material eyes a part of the titanic struggle which at present convulses this troubled world, believes that some of the events which he has taken a part in may be of interest to others.

And yet I am sure there must always be hidden somewhere in the back of his mind the doubting conviction that the events which seem so real to him may lack, when expressed, the value which they have in his own eyes.

George Moore, in his altogether charming and entirely irresponsible writings, "Memoirs of My Dead Life," says,

"Think of the writer of stories! Two, three, or four more stories are required to make up the

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requisite number of pages. The dusk has interrupted his labor, and he rises from his writing-table asking who will care whether the last stories are written or left unwritten? If he writes them his ideas will flicker green for a brief springtime, they will enjoy a little summer; when his garden is fading in the autumn his leaves will be well-nigh forgotten; winter will overtake them sooner than it overtakes his garden, perhaps. The flowers he deemed immortal are more mortal than the rose. 'Why,' he asks, 'should any one be interested in my stories any more than in the thousand and one stories published this year? Mine are among the number of trivial things that compose the tedium which we call life.'"

In much the same way I am a little doubtful as to whether the things I saw, and had a part in, may have the same active interest to others that they did for me.

During a busy period of more than two years in embattled France I had ample opportunity to observe the work which my French professional brothers were doing, and the conditions under which they worked from the first line trenches where the wounds are made, back to the hospitals of the inner area where the human wreckage is patched and cobbled and coaxed again to full efficiency, or to something which has a semblance to man as God made him in His image.

The wastage in Medical personnel has been high in the present war and the Sanitary Service has paid its own red toll shoulder to shoulder with the brothers of the Line. I believe this common sacrifice in the cause has brought the two services closer together than ever before: has enabled each

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to become better acquainted with the fine qualities of the other and to be more tolerant with the shortcomings.

I saw things which I cannot write of for obvious Military reasons. I saw others which are best left untold as the gratuitous transcription of suffering and horror which should have no other than a morbid interest to the layman.

The following pages comprise the impressions of a Medical Military Observer of matters in his own province, together with notes of other current affairs. It is in no sense technical and it makes no pretense to the dignity of "literature."

I hope that there may be something of interest in it for those who look with wistful eyes to the troubled East and wait with aching hearts for the return of some one, "over there."

JAMES ROBB CHURCH.

Washington, D. C.,
July, 1918.

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THE DOCTOR'S PART

CHAPTER I

INTRODUCTORY

I SUPPOSE that prior to the present war few of the people who make up our ten million and odd of population had any more than a hazy idea of what the army, which they paid taxes to support, did to justify the expenditure. Ideas were hazy because, in our remoteness, it seemed that we were geographically immune from attack, and consequently the armed forces carried about the same interest as father's old revolver, loaded and tucked away in the back of the top bureau drawer: a tacit concession to the possibility of the unexpected burglar, but from any other standpoint of little interest.

And so, when in 1915 I told some of my

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civilian friends that I had been ordered abroad for duty as Military Observer, they looked slightly puzzled and after asking, "What do you mean, Military Observer?" reverted to current topics in a language they could understand.

A Military Observer is an authorized international Village Pest: he is tolerated by belligerent powers because they may some time desire themselves to be onlookers in a quarrel which does not concern them. He is treated with very perfect courtesy, but what he sees is not nearly so much a matter of consequence to the nation at war as to put something over on the enemy. He is governed and hedged about by very precise diplomatic conditions, and transgression of them is more than apt to result in his recall.

From his own standpoint, he is, to begin with, a neutral: at least, he is very particular to convey that impression to those with whom he comes in contact. In the privacy of his own mind it is allowable to give rein to his indi-

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vidual wishes and sympathies, but aside from that he must be a perfectly impersonal and very inquisitive person.

His duties are to collect and transmit information: that is about the sum and substance of the instructions he gets, and the methods are a matter of his own personal resource and ingenuity. The fact that he is an accredited representative of his Government gives him a certain standing with the country to which he is sent, but aside from that it is a more or less perfunctory status. In the first place, the warring power is entirely too busy, as I have said, to give up time which may be profitably employed in that engaging pastime of "killing your neighbor" to showing a benevolent neutral exactly all the detail of the *modus operandi*. In addition, there is also the justifiable uncertainty as to which side the neutral might take if he decided to break into a busy private quarrel. The usual International procedure is to carefully guard the safety and welfare of the observers so that they may be returned in

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undamaged condition eventually to the country which sent them. At stated intervals trips are arranged for all the Observers in the country and they are taken under the chaperonage of a designated officer to such points as the fighting host deems proper, and he shows as much as is considered advisable. You do not see more than that, either: as Ruggles of Red Gap said, "it simply isn't done." The country you represent cannot make too many requests, for it would be embarrassing to refuse them and embarrassing to be refused. And there you are! Which may go to show that the job of collecting and forwarding useful information from a country at war, to your own Government is by no means a sinecure, but a job which requires patience, tact and resource. If you add to this the fact that all the interesting things that you want to know about are camouflaged under a language which you thought you knew something about until you heard the rapid and careless way its inventors use it, it may readily be understood that the life of the

WAR DEPARTMENT
THE ADJUTANT GENERAL'S OFFICE

WASHINGTON

November 15, 1915.

From: The Adjutant General of the Army.

To: Major James R. Church, Medical Corps, Fort Crockett, Texas, through the Commanding General, Eastern Department.

Subject: Detail as Military Observer.

1. The Secretary of War details you as a military observer with the French armies in the field.

2. The Secretary directs, as necessary in the military service, that you repair to this city at the earliest practicable date and report in person to the Chief of Staff for temporary duty in his office for a period of fifteen days; that at the expiration of this period you proceed to Paris, France, and report to the American Ambassador at that capital for the purpose of carrying out the instructions of the War Department, and that upon the completion of the duty enjoined you return to your proper station.

3. The Secretary of War appoints you an acting quartermaster while on this duty.

P. C. MARCH,
Adjutant General.

Rec'd Hq. Eastern Dept. Nov. 16, 1915

201 Church, James R. 1st Ind. was-mr

HQ. EASTERN DEPT., Nov. 17, 1915.—Through Department Surgeon and Comdg. Officer, Ft. Crockett, Tex., to Major James R. Church, Med. Corps. W A S

H.P.B. 2nd Ind.

Office Dept. Surgeon, E. D., Nov. 18, 1915—Through the C. O. Ft. Crockett, to Major James R. Church, M.C.

RECD HCDG
AM 11/22/15

Thru Surgeon, to Maj. James R. Church, M C, 11/22/15

AUTHOR'S APPOINTMENT AS MILITARY OBSERVER
IN FRANCE

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Military Observer is not an idle one nor altogether a bed of roses.

I knew all this as a matter of theory before I went to France but, once there, I quickly recognized the difference between theory and practice.

In November, 1915, I received an order which came in the nature of a surprise. (See page 21.) The opportunity offered was a fascinating one, but the novel demand which it makes on one's resources would, I think, leave the average man with some apprehension as to whether he could measure up to the standard expected of him.

I left the United States on the 15th of January, 1916, and after the usual winter crossing, which was at that time little disturbed by any apprehension of submarine menace, landed at Liverpool; from Liverpool to London and, after a short stay there, to France. The Channel crossing, even at that time, was a tedious and delayed procedure, and one knew only a short time in advance as to what port he would

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sail from and at what he would arrive. We crossed from Folkestone to Dieppe on the afterward ill-fated *Sussex*, and if she had been torpedoed that day, I think there might have been an extended casualty list, for every available inch of space seemed to be occupied by human freight. The cabins were full, the dining saloon was jammed, all deck chairs occupied, and many stood on deck during the five or six bleak hours that it required to transport us from Albion to Gaul. Fortunately, the sea was smooth and there was none of the horror of seasickness.

At Dieppe, in the darkness of a winter night, we proved to the Alien Officer that we were suitable for entry into France, and I was chided for not showing the diplomatic passport which I had and thus taking precedence over my tired fellow passengers.

I unwittingly slipped one over on the Customs, for in my suit case I had about 500 American cigarettes on which I supposed I should either have to pay duty or claim diplo-

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matic exemption. However, the officer with whom I was traveling put his hand baggage down next to mine and the French examiner opened two of his pieces, none of mine, assuming that they all belonged to my fellow traveler, and I went gayly and guiltily away.

We arrived at Paris at one in the morning of the 29th of January, and at nine that night received our first intimation, from the measure of personal realization, that we were in a war-ridden country.

Some three or four of us went that evening to the Gaumont Palace Theater, over in the Montmartre neighborhood, to a moving picture performance. As we came out at the end of the show we noticed that the city was darker than usual and that there were crowds of people in the streets, watching the skies. Pencils of white light streaked the heavens and there seemed to be a rapt attention in the air of all the low-voiced French speaking people whom we passed.

We went down through the gloomy streets

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This ended my first day on French soil.

Of necessity, my earlier days in the French capital were given up to adjusting myself to conditions there, to finding how I might be of the best use and familiarizing myself with conditions as they existed in relation to official life and my chances for obtaining the information for which I had been sent abroad.

After about a week I was notified that I would be received at the War Department as an accredited representative of our Government, to be introduced there by our military attaché, who would present my credentials and introduce me to those who might further my aims in France.

To any one who has business with the French War Department the contrast with our own methods in this western democracy must be very striking. In Washington, prior to war days, any citizen of our free republic had the privilege of walking unchallenged into the War Department and was only possibly halted at the door of the office to which he

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sought admission. In France things are decidedly different. The War Department in France, the building in which is housed the machinery which is running so large and complicated an organization, is unpretentious, rather out of repair and does not compare at all with our own ornate building in Washington. It seems a queer setting for the cunning genius which is, and has been, directing so fine an attack and defense against the invading Hun for the period since 1914.

We were challenged at the gate, a very secure gate, at the entrance to the War Department by a reservist in red "pants" (very red), with a long mustache (very long), who scrutinized very carefully the specific written pass which we had and, after his approval, admitted us to the labyrinth of dusty winding stairs, which took us eventually to a courteous Major of the French service; who chatted very amiably with the Military Attaché and, as I understood, promised in a general way to afford us the facilities which were usually granted to

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representatives of a neutral country. From his office we went to another one, where we were presented to an equally charming French Staff Colonel, who renewed the assurances of good fellowship but made us no definite promises. In fact, it seemed to be a recognized part of the game that, while we were to be accorded all courtesies and every possible opportunity for the gleaning of information, it was probable that we could not rely to an excessive extent on the overtaxed resources which had other things to do, rather than to explain to the curious bystander why they were doing them.

This was my introduction to my duties as an Observer in France. Added to this, I found that it was difficult for me to understand the rapid, careless French of the Parisians and evidently more than difficult for them to understand my best attempts at their own language. Fortunately, for the sake of my mission and its fulfillment, in due course of time the rapid stream of French which at first meant so lit-

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tle to me, fell into a more or less orderly sequence and I was able to mend many of the errors of my early days, both those of omission and commission. As an evidence of helplessness during my first experiences in and about Paris, I might cite my system of getting from one place to another.

The American policeman is replaced in Paris by the "Agent de Police." He is sprinkled about Paris with about the same frequency as the American "copper" is in our own cities; his duties are those of our own police officers, and his manners are tinged with the true politeness of the French, and if he does not expect it, at least he appreciates a military salute, whether one be in uniform or not.

When hopelessly lost, I found that my best way was to approach one of these dignified Agents de Police and, in the best French I could command, ask him for directions in regard to the place I wanted to go. If he understood me (which he did about half the time), he immediately launched into a voluble explanation. I

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paid no attention whatever to this and let my mind wander to any extraneous topic: Ty Cobb's batting average, who would win the Yale-Princeton game that fall, or anything else that came into my mind. When he reached the end of his explanation, however, I became instantly intent, for at the conclusion of his directions he was always sure to point in some direction, and, following the lead of his outstretched hand, I thanked him courteously in French and started off in the direction which he indicated. After having gone as far as I considered safe, I hunted up another Agent de Police and worked the same game on him. In this way, by what I suppose one might call a semaphore system, I was enabled always in broad daylight eventually to work myself from one place to another. If the condition had occurred in the night when I could not have seen my policeman friend, all my knowledge of spoken language would have availed me little or nothing.

Realizing my shortcomings in the French

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language, a knowledge of which I had foolishly supposed I possessed when leaving the United States, I sought quarters at once with a French family, none of whom had any acquaintance with English and who were willing to attempt to instruct me in the intricacies of French as it is spoken in Paris. The acquisition of French under such circumstances is not entirely a bed of roses. Sanitary improvements in France are not on an equal plane with those to which the average American is accustomed. The French find no difficulty in keeping their houses at least as warm as the temperature outdoors; beyond that, they seem to have no particular interest. The house in which I lived during a severe winter had no heat in it with the exception of a gas fire in the kitchen to cook with and was guiltless of any bathing facilities. When one felt the necessity of a bath, there was always the French public bath establishment available for a certain, not excessive, fee.

I know many people who cheerfully state

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that if they went abroad they would immediately seek quarters of this kind in a French family and learn French. I doubt very much if they understand what the whole thing means. To be a guest with people, who, although kindly, considerate, interested and thoroughly sympathetic, have a different viewpoint in regard to almost everything, makes the situation a little trying. In addition to this, to be in an atmosphere which is murky with an unknown language which is constantly dinned into your ears, leaves one's brain tired and fagged beyond expression at the end of the day.

My good landlady used to come in and talk French and read French to me in the morning while I had my early coffee. She captured me at noontime and talked French to me all through my midday meal. On any of my free days she appropriated me to go with her to points of interest in Paris and to listen in the meantime to the rapid flow of very perfect but badly understood Parisian French. I went to the theater with her on my free evenings. I

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met all her friends who came to call on her. I was taken to call on all her French friends and by them, in turn, upon all their friends. None of them spoke any English. I lived in a befuddled atmosphere of a language in which I was constantly groping and never sure of my meanings. I made mistakes, they misunderstood what I wished to say, and, all in all, it seemed a most discouraging proposition.

I remember one or two despairing occasions when I had been all day battling to keep my chin before this French flood, when on my return from some French excursion of this sort I made a plea that I had collars to buy or a friend to see and my last ray of hope was choked off by the cheerful assurance of madame that she was not at all tired and would go with me.

The above is not a complaint, but merely a suggestion that the acquisition of a practical working linguistic knowledge which one assumes that he has, may not always measure up to the standards which he has set for it.

CHAPTER II

GENERAL SANITARY SERVICE OF THE FRENCH

I SUPPOSE at the present time there is no doubt in the mind of any one in the civilized world that the Germans in 1914 were the most perfectly prepared of any of the nations for a state of invasive warfare. The French were prepared, but still in the midst of many improvements in the perfecting of their war machine which had not been brought up to date.

Along with other things, the Sanitary Service of the French was still in a condition of transition. By "Sanitary Service" I mean the whole measure of the French for caring for their sick and wounded, the same thing which is covered in our own service here in America under the direction of our Medical Department. In 1910 a decree had been issued by the French making decided changes in their Sani-

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tary Service, and when the war broke out in 1914 these changes had not been thoroughly incorporated into their system of army organization. Of necessity on this account there was a certain amount of initial disorganization in the care of those wounded or sick amongst the army forces in the early period of the war.

To give some idea of what the French Sanitary Service, the organization that cared for their wounded, covered, it might be well to understand some of the arrangements the French made for this purpose during times of peace.

Of course every one knows that all French subjects are liable to military duty, obligatory military service. All France in times of peace is divided into "regions"—there are 21 of these, all told, in the Republic—19 in continental France proper and 2 in Morocco and Algiers. During peace times each of these regions is occupied by a French Army and military command is vested in the commander of that army. During times of peace certain precautionary measures are taken through the Sanitary de-

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partment in each of these regions. That is to say, the French have looked forward to a possible invasion of their country ever since the war of 1870 and have been shaping their affairs by the light of that occurrence. The sanitary matters in each of these regions were organized partly under the strict supervision of the regular medical department of the army and partly through the intermediary assistance of the French Red Cross.

At the time of mobilization the command of these regions passed from the commander of the mobile army, who went with his forces, and was delegated to an officer of the reserve or one who was beyond active military age, and upon his shoulders fell the responsibility for the putting into operation of the measures instituted in times of peace for the care and reception of wounded which might result from the war.

This meant, in fact, the selection in each region of a certain number of buildings, schools, where available, and large public buildings, or

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anything of that sort which would be readily adapted to the care of the sick, and the drawing up of plans leading to their rapid transformation for the purpose intended. In addition to this, the Red Cross undertook to furnish a certain amount of supplies for the maintenance of these hospitals, and they were stored in each district, although not necessarily in the hospitals themselves.

In regard to personnel, the medical personnel from the standpoint of the Red Cross was practically nil. This can be readily understood when we consider that France was living under a system of compulsory military service. All men of military age, whether medical men or otherwise, were subject to draft on the mobilization orders issued at the commencement of hostilities, and this left no opportunity for any surplus personnel of a non-military type to be used to man these hospitals. On the other hand, the Red Cross Societies trained and educated a certain number of women who were competent, to a limited degree at least,

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for the duties of nurses. All this was France's reserve in event of just such an occurrence as the invasion by Germany in August, 1914.

As I have stated before, this organization was not completed at that time in accordance with the decree of May, 1910, and in the early days of the war there was undoubtedly much hardship due to this fact. As time went on, the French realized that the conflict was not a matter of months but one of a considerable length of time, the various defects were remedied, the sanitary machine and personnel hammered into shape and brought to work with the most excellent efficiency which characterizes it to-day.

For instance, after the battle of the Marne in September, 1914, there was lacking transport by train, by horse-drawn vehicles, and most notably by automobile transport. There were not nearly sufficient hospitals to receive and care for the large number of wounded which came from the battle of the Marne and the French retreat preceding this. As a natural

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consequence, there was much improvisation and, as would naturally be expected, this makeshift method did not stand the test and gave very evident proof, not only to the Medical Department itself, but to the generality of France, that rapid improvement in the whole system of caring for the sick and wounded was a very imperative necessity.

France took this matter very seriously, as was indicated in the report of a High Commission authorized by the Chamber of Deputies and commonly known as the "Reinach" report, which, by the way, forms very interesting reading in regard to this subject.

Dating from this period, conditions in regard to the care of sick and wounded fell into more orderly lines, and errors in the assignment of personnel and the utilization of various volunteer organizations were more clearly classified, and the whole system was put upon a more orderly basis.

The French had at this time, that is to say, after the battle of the Marne, found the ne-

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cessity of sending a great number of their wounded far into the interior to be taken care of by the volunteer organizations already referred to. They found from actual experience that in this practice one of two conditions existed. Either the men did not receive the precise and careful treatment that they needed, or, through an excess of sympathy, they were over-treated and were held at the rear for a longer time than was necessary, so that the fighting forces at the front were unnecessarily deprived of the services of men who should have been returned long before the period of their actual arrival.

A French medical officer, in commenting on this situation to me, remarked: "The armies melted like snow and many who were furloughed to the interior disappeared like rabbits in the underbrush." It is unnecessary to say that, after a short experience of this kind, the French realized that some more practical method had to be evolved, and this was the beginning of

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the present workman-like system which leaves very few able-bodied men unaccounted for.

With the present system I think it is safe to say that the most important thing in the sanitary scheme is that comprised in the French word "triage," which means "sorting." You hear it everywhere in connection with the operation of the service, and in addition to being a method of classification, it is a careful and continual check on the movement of the wounded and disabled. After the experience gained by sending the non-effective back into the Zone of the Interior, the French cast about for a more logical method of caring for them. It was decided that the best thing for both the State and the individual was to shorten as much as possible the time between the receipt of the injury and the curative means employed. The percentage of recoveries was higher when wounds were treated within some hours after their infliction than if days intervened, and in this way lives were conserved not only for the benefit of the individual, but to the advantage

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of the army as a further addition to the fighting force. In the second place, it minimized very much the evil of absenteeism which I referred to and which at one time was a serious problem for the French to face.

The outcome was that the majority of the cases were held in the Zone of the Armies and there, under direct Military authority, they were not lost nor delayed in their return to their organizations. With this idea the various units of the Zone of the Armies were developed and built up. The Evacuation Hospitals came to be, in part at least, true hospitals and not merely forwarding points. The Ambulances of the First Line took more formal care of the wounded than before, and throughout the Zone of the Armies the Surgical centers were developed and in them patients were grouped who would have been scattered under the old system throughout the Zone of the Interior.

I spoke a few pages back of the part which the French Red Cross plays in the care of the sick and wounded. It seems to me that there is

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here, in the United States, a good deal of misunderstanding as to the real function of this society during time of war. With the French it is almost exclusively employed in regions other than of actual conflict. The Red Cross nurse in the poster, she of the winsome face and spotless uniform liberally adorned with the insignia of the society, caring for a wounded man amid a hail of shot and shell, is, as a matter of fact, replaced by some hairy and probably dirty-faced Brancardier whose military duty it is to get himself killed if need be while he brings in his wounded brother of the line. Common sense would seem to indicate that the fringe of a battlefield is no place for a woman. I have no desire to impugn their courage, but it just is not a woman's job any more than it would be for them to take rifle and grenade and go charging forth to attack the opposing lines. There are some instances where women have maintained aid posts and rest and comfort stations close to the lines and they have done the work well, but the greater part of the duties

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which must be performed on or near the front lines fall to the hand of man rather than to those of the gentler sex.

As it has been with the French, so will it be with our own forces, and the adventuresome and plucky girl who goes abroad with the idea of work of this character will probably be disappointed. This does not mean that those who nurse with the army are free from risk, for the Boche, in the persistent idea of undermining the allied morale, still sticks, and probably will continue to stick, to the plan of bombarding and bombing buildings protected by the Red Cross with the same indifference that he displays in regard to any question involving right and wrong. Nurses and medical officers have been killed in a number of hospitals under these circumstances and there is no probability that any of the Sanitary Units which work within gun range or easy flying distance of the German lines will have any immunity from attack. The determination of the personnel which is available for the Sanitary Service of the French

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is not a difficult matter. No more so than the determination of the personnel of the Army, since both are dependent on the law of universal service.

The Regular—standing—Army of France is fixed by law at a certain number both as to the commissioned and enlisted personnel, and in the event of the outbreak of war this does not increase as such, but remains the same. The increase is made in the personnel which is called to the colors from the citizens of the land who have been trained for this duty by the period of compulsory service and the yearly maneuvers. The medical profession has no exemption (neither has the clergy) from this duty, and if a doctor is not needed in his own character he goes to make up part of the combatant force. As a matter of fact, with the high wastage in the Sanitary Service there has been occasion not only for all the graduates in medicine, but the French have made use also of certain of the medical students who have completed enough of their work to be of actual service

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with certain units in the field. These are termed the "Médecins Auxiliares," and are of very real value in the work of the corps.

In time of peace each man who has completed his training knows to what provisional regiment he is assigned and each officer, medical as well as combatant, has his sealed orders which he is to open if war is declared and which will give him directions as to where to report and to whom. General mobilization orders are prepared also and are stored in the barracks of the "Gendarmerie National," or State Police. When the State decides to call forth the forces, the necessary data, date and place, etc., are filled in at the barracks of the Gendarmes and the proclamations, or orders of mobilization, are all posted throughout the country at the same time. Care is taken so that these reserve regiments are made up of the inhabitants of the region, and the consequence is that all who are called are supposed to be at the depot or place of assembly within twenty-four hours after the mobilization order has been posted.

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As to the medical personnel of a regiment, generally the senior officer is one selected from the regular establishment to give balance to the organization and the others supplied from the reserve who come under the mobilization.

In addition to those Medical Officers who are needed for the care of the Regiments, there are of course a number who are required for other organizations. To meet this requirement there is kept in the office of the Chief of the Sanitary Service a list of the Medical personnel which is available and from it is drawn the number required for extra-regimental requirements. In this reserve army there is no limit; those who are needed are called and on the cessation of hostilities they revert again to an inactive status. The effect is that every able-bodied man in France is a potential defender of the State and that he must stand ready to drop all else and give his services to the common need. The education of these Reserve Medical Officers is that which is acquired by any practitioner of medicine plus the term of required

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service, three years with the colors. Under these conditions any man called from civil life has the advantage that he does not go from the paths of peace to the ways of war with only a hazy idea as to what the duties of a soldier are. He has had, so to speak, a magnified Plattsburg and comes to the ways of the service with less timidity and more confidence than if it were altogether *terra incognita*. For the Medical Officer of the Regular Army admission is by way of the schools at Lyons, or elsewhere. The young man who decides to make Military Medicine his career matriculates at the Medical School at Lyons and takes the same courses there as do his civilian brothers, but in addition to this he has extra work given by the Military Faculty in the same place and he lives during the time of his study under Military control.

This school is organized to train five hundred or more students and the proportion of accepted candidates is generally about 10 per cent. The applicant for admission must be un-

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der twenty-four years of age, the possessor of a Baccalaureate Degree and have had one year in a recognized Medical School. If accepted after physical and mental examination the student receives the grade of "Aspirant," which is equivalent to a warrant grade. After admission to the school he is assigned to a Regiment, usually Cavalry, as a private, and serves there with no medical function for one year, after which he returns to the school and takes up his professional work. The course is three years in duration and the work is intensive. Those who pass the examinations are commissioned as second-lieutenants after they receive the Medical Degree and are then sent to the Military Hospital, Val de Grace, in Paris, where they receive practical instruction for eight months and are then assigned to regiments and ranked in accordance with their standing. Promotion to the grade of first-lieutenant is automatic after one year, or four months after the course at Val de Grace, and relative standing is dependent on the grading in the final examination

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in this hospital. Promotion thereafter is by selection rather than by seniority, but no one can skip a grade and, unless an officer has shown some unusual aptitude or brilliance, it is not usual that he be advanced over the heads of many above him. There are authorized one thousand Dentists, who are not commissioned, and the Army Nurse Corps is fixed at one thousand also. There is agitation to increase the number of Dentists and naturally the number of nurses is entirely insufficient to meet the demands of war-time conditions.

The direction of this service lies in the hands of a civilian who is a member of the French Cabinet. He is titled the "Under Secretary of State for Sanitation," and in spite of the "Under" in his designation he is practically autonymous in his position and his decisions in his own Department carry authority. Prior to the war one of the General Officers of the regular Medical Service held this position, and at present two of them act as aids to the Director. I think it is doubtful as to whether the change in direc-

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tion has been a gain and that it is problematic as to whether the system does not sooner or later revert to its first status. The head of all the service centers with the Director in Paris and branches throughout the different armies and regions which are affected.

The Service of Supply, as well as that of replacement of personnel, is based on the plan of échelon and a marked feature is the numerous reserves of both men and material which are maintained at various points in the chain which stretches from the Interior to the ultimate limits of the fighting line. It simplifies the system of supply, for all that is required of any supply depot under this system is to see that the supply in the depot is kept at the normal level, and each one calls on the one behind it to replenish what has gone on to the unit in front. Thus, the Brigade supplies the Regiment and draws on the Division for replacement; the Division, after supplying the Brigade, depends on the Army to refill its stores and so back to the Central supply Depots in the larger cities of the Zone

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of the Interior. This obviates the necessity for the repeated transfer of requisitions and the chance of delay due to congestion in traffic or delay in approval or other usual causes. It is simple and effective.

It is difficult to give in so brief a space any adequate idea of the complexity of the machinery which is evoked in the care of an army under field conditions. We must understand that it is not only the question of caring for the wounded man. That is the apex of the pyramid, the object of the entire procedure, but as we multiply the one man by "X" the pyramid descends to its base with a wide angle and we find that many questions which do not at first occur to us have to be considered. Transportation, supply, records, construction, feeding, preventive medicine and many other things fall in line to make up the perplexing whole. And, withal, everything must function with a certain degree of smoothness and be fairly automatic, for unless the wastage is promptly and carefully made good there will not be fighting men

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enough to carry on and the State will have to divert too much of its energy to the care of its non-effectives.

As an evidence of the magnitude of the task which falls to the lot of the Sanitary Service in war, I may state that in one operation which lasted for three days the casualties were estimated at 90,000. A proportion of these were killed, to be sure, but even that involved duty in burial and in completion of the records, and the remaining fraction leaves us with the impression that although it is a tremendous task to maneuver in battle large masses of troops, it is by no means easy to collect and put in shape again those who have fallen in the attack.

The accompanying diagram shows graphically, and in a general manner, the path followed by the wounded man from the first line to whatever point he be destined. The work of the front line trench is carried out by the Regimental personnel, both Commissioned and enlisted, and this personnel is augmented by the

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band, provided there be one in the Regiment. The duty of the Regimental personnel is finished when the wounded are delivered to the First Aid Post, which has its own personnel for the care of the cases which come to it. The route of the wounded soldier from this point may be by several means of transportation. If he is to be carried by hand, this duty is taken up here by the Divisional Group of Litter Bearers, which is distributed in accordance with need by the Division Surgeon. He may go direct to the Automobile Surgical Ambulance if he is a bad case, or he may be taken to one of the Ambulances of the first line to be shifted possibly from there to the unit just referred to. If able to walk, his problem is simplified and he makes his way on foot. In certain instances it is possible to evacuate the first aid posts by automobile direct, and sometimes when it is not possible for the automobiles to approach the Post, a Collecting Station (not shown in the Diagram) is established in a sheltered position in the rear of it and the wounded evacuated to

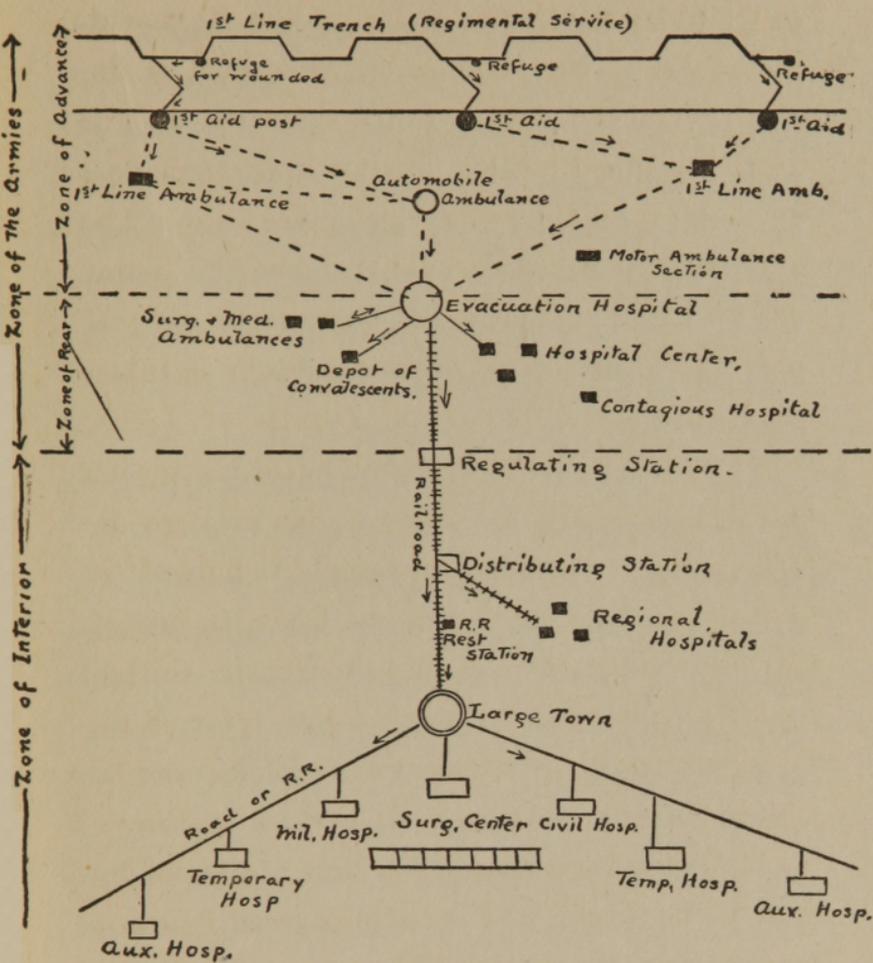


DIAGRAM ILLUSTRATING THE ROUTES OF EVACUATION OF THE WOUNDED FROM THE FRONT LINES TO THE ZONES OF THE INTERIOR.

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it by hand litter and there picked up by the automobiles. It is not unusual in a busy sector to keep an automobile constantly stationed at such a point to take care of those who need immediate transfer. It must be remembered also that all the units of the trench line system are intimately connected by telephone, and that it is not a difficult matter therefore to call for transportation when required.

The automobiles which are charged with this duty of evacuation are furnished by one or more sections which are ordered to certain sectors for duty in accordance with the intensity of the action. A Section consists of twenty cars and the capacity of the cars runs from three lying cases for the Ford type to five in the latest type of the French ambulance with the Kelner type body. With the capacity known and the mileage to be covered in the run and the average speed possible, a pretty accurate estimate can be made as to the time necessary for the evacuation of any number of wounded. The First Line Ambulances may retain their mobile func-

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tion and serve merely to care for the wounded until they are taken to units further in the rear, or they may become fixed, the "Ambulance Immobilisée" in French terminology. To accomplish this latter end a supplementary section, known as the section of hospitalization, is sent up from the Divisional reserve and added to the mobile ambulance. It comprises both additional personnel and materiel and serves to transform the mobile unit, with its comparatively meager equipment, into the equivalent of one of our Field Hospitals.

When the necessity has passed, this reinforcing personnel and materiel is returned to the Division reserve and the Ambulance reverts to a mobile status again. The Automobile Surgical Ambulance and the first line ambulances send cases to the Evacuation Hospital, which may be at a Railhead and must of necessity be *on* a railroad. These Evacuation Hospitals are made up of two sections, either one of which may function independently, or both combine to make up a more formal organization. If they

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function separately, their province is more that of a collecting and sorting point than of a Hospital proper. I have spoken of this in preceding pages, and of the important part which these hospitals now play in the Sanitary scheme.

At the Evacuation Hospital, of whichever type it be, the wounded are disposed of in one of several ways. If there is a hospital section attached to the Hospital, they may be transferred to it for treatment until they are in condition to be sent back to their units again. There may be a Hospital Center in the neighborhood, and in that event they may be transferred by automobile to one of the hospitals which compose it. There are usually one or two Ambulances in the neighborhood also which can care for a certain proportion of cases. In connection with this hospital there is also a Depot of Convalescents and "Ecloppés," as the French call those who have not much the matter with them. This Depot serves to relieve the hospital of those who are well enough to dispense with

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formal care but not yet strong enough to go back to active service. In addition to this there is at each Evacuation Hospital the materiel and personnel to make up two Sanitary trains.

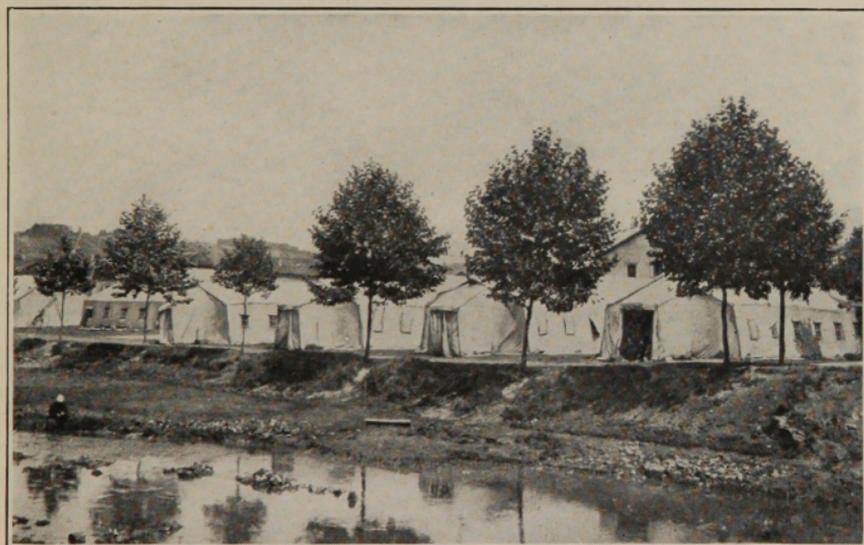
At this Hospital the Sanitary trains are loaded and routed to their destinations. There is usually a daily train, and in times of activity the number increases. These trains are made up so that there is the minimum amount of transfer of the wounded carried by them. So far as possible trainloads are made up to go entire to some definite point and thus it is not necessary to break out cars for different points nor to disturb the wounded until they have reached the point of final debarkation. This simplifies matters considerably, and makes for the comfort and well-being of the wounded. Before a train is started word is sent to the point to which it is routed and arrangements are made there to meet it at the hour specified and to dispose of its load in accordance with the number of vacant beds in the hospitals of the Region. The Director of the Line of Com-

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munication is kept constantly informed by the Surgeons in charge of the different hospitals and Regions of the number of available beds in each one so that in routing his trainloads of wounded he knows exactly what he can count on in the way of resources in any one place. This system has grown up with the experience in the transfer of wounded and is a long step ahead of the rather crude and somewhat haphazard method which prevailed at the outbreak of hostilities. The wounded shipped by train to the interior are inspected at various points. Particularly at the "Gare Regulatrice," or Regulating Station, which usually is at the junction of the Zone of the Armies and the Zone of the Interior. It is the duty of the Medical Officer in charge at this point to see that no case goes beyond it which should be retained in the Zone of the Armies and that those who are forwarded are in proper shape for the journey. Now that the Sanitary Trains are more formal in character and manned by an experienced personnel this duty is less exacting



RED CROSS NURSES AT A RAILWAY STATION CANTEN GIVING COFFEE TO THE WOUNDED.



TENT WARDS, SHOWING ONE OF THE TYPE OF TENT USED BY THE FRENCH.

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than when the Regulating Station stood as the real check on what had been done at the point farther forward.

On the line of Railroad at appropriately spaced intervals are Railroad Rest Stations and Railroad Canteens. Stops are made at these and the wounded fed and examination made of their condition. These canteens are in charge of the Red Cross and the feeding is quickly and systematically done so that there is little delay in the progress of the wounded. A train may be diverted to one of the Regional Hospitals, or group of Hospitals as shown in the Diagram, or it may continue to a large town which is a center for a number of Hospitals where there is provision for not only general care of the wounded, but for the various specialties which may be needed by individual cases. In addition to the two Zones listed in the Diagram, there is another known as the Zone of the Line of Communication. This comprises the Railroad and the adjuncts to it. That is to say, the right of way, the

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various Rest Stations and Canteens and the Hospitals which are connected directly with it. The administration of this Zone is an important post and upon the efficiency of the Director depends to a large extent the smooth functioning of the service further to the front. It is presided over by a General Officer and he has his staff which includes a Chief Surgeon and various Inspectors who are charged with the duty of seeing that all measures dealing with the care of the wounded and sick are properly performed. This includes not only the question of transfer, but that of supply of personnel and materiel and the maintaining of proper reserves at the designated points.

The diagram does not show the full complexity of this service in the Zone of the Line of Communication, for there are many minor points which, while essential to the proper functioning of the whole, are too much a question of detail to be brought out in a general scheme. A little thought will make evident what they are: the question of the channels of the vari-

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ous orders, which secure an orderly correlation of the various fractions which go to make up the whole; the maintenance of the railroad system which is charged with the transfer of the wounded; the provision of the proper quota of rolling stock for this end in each part of the combatant area; the management of the automobile and horse-drawn transport; the assignment of personnel to the various units. These and many more go to make up a problem which requires careful and intelligent handling to ensure good results.

We, on this side of the Atlantic, have been rather prone to plume ourselves a good deal on our superiority in the matter of Rail transport and to look on the Continental system as perhaps inferior to our own. Shortly before I left France something was brought to my attention which made me doubt whether this supposed superiority of ours was in reality so very marked. It became necessary to arrange for the transport of a large number of troops and the movement was to be

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executed with as little delay as practicable. Word was sent by the Director of Railways to the General Manager of one of the Railway systems, stating the requirements and asking how soon the Company would be able to start trains, what headway they could be run at after they had started and for how long a period the service could be maintained at that, the maximum rate. The answer came back very promptly that the Company would be ready to start the first train in three hours, that after the first train had left they would run others with half an hour's headway, or as fast as they could be loaded, and that they would maintain this service and schedule as long as was necessary. The Company not only made this statement, but they lived up to it. It seems to me that when we consider that this was done in a country in a state of war and with necessarily depleted equipment, we might consider it as a very creditable piece of railroading not only for Continental France, but for our own country.

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The Sanitary Train has been a source of some embarrassment for the French. The European type of car does not lend itself well to the purpose, and they have been obliged to exercise a good deal of ingenuity to meet the situation. The Continental "carriage" is short, about half the length of our regular passenger car, many of them have separate compartments opening with side-doors and no communication one with the other. The use of this type has the disadvantage of interrupting communication through the train which is a serious objection for a service of this kind. Some of these cars have been adapted by the use of special apparatus and with telephone connection, but the more practical type is the baggage car, which in addition to the side-doors has an end door also which does away with the bad feature of the other class. There are several trains made up of the long baggage cars of the International Type which run on the Expresses from Paris to Nice, and these easily lend them-

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selves to the required purpose but are too few in number to take care of all the traffic.

Any attempt at description of the various phases which go to make up the complex whole of this system of care of the sick and wounded must inevitably lead one through a maze of detail. Each step carries one to a fork where the subject branches and each branch further subdivides until one unexpectedly finds himself perched on the ultimate twig and perhaps far from the object which he set out to pursue.

The rather brief summary which I have attempted will, I think, serve to show the magnitude of the task, and the thought and patient care which has been exercised in working out and putting into operation the present system which, while probably susceptible of further refinement, is still wonderfully efficient in the care of large numbers of helpless men.

CHAPTER III

HOSPITALS OF THE INTERIOR

CERTAIN terms have by constant use come to have an accepted and clear meaning to those who are engaged in the serious game of war on the other side of the Atlantic.

Our interest in the affairs "over there" has brought a knowledge of these terms overseas to many of us, but it may not be amiss to state in a general way how the territory of France is divided for the time and uses of war.

To begin with, there are two general divisions. A line is drawn, not in accordance with any fixed geographic boundaries, but in accordance with the exigencies of the situation, and all territory on the side nearest the enemy constitutes "The Zone of the Armies." That behind this is the "Zone of the Interior." While all France is really under Military control, the

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Zone of the Armies is the special province of the Military. All entrance into it, all exit from it and all movement in it is governed and sanctioned by the "Grand Quartier General," or Great General Staff, which is presided over by the "Generalissime," or Supreme Commander of the fighting forces; at the present writing, General Foch. Incidentally, that name is pronounced "Fosh," with the o long as in "Oh." This Zone of the Armies has other subdivisions which will be spoken of later.

The Zone of the Interior comprises the rest of the country that is not needed by the active War Lords and is presided over by the Civil authorities so far as ordinary matters go, and by the Minister of War when it comes to a question of strictly Military jurisdiction.

In this Zone of the Interior are the ultimate repair shops for the damaged human machines that have been put out of commission at the front. They filter back to these just as powders are graded through a series of sieves of varying mesh and it results that only the very

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severely hurt (from an economic point of view) come to them.

By this I mean that when there is any probability of returning a soldier to the firing line as an effective within a certain length of time he is held within the Zone of the Armies, at one of the large Hospitals there. When he has lost a leg, an arm, or is otherwise permanently disabled, or when his cure must take more than the allotted time, he goes back to the Zone of the Interior and is placed in the Hospital best suited to his particular needs.

Three years of war have made a vast difference in the orderly disposition of cases as well as in other matters and now the French have in addition to their general hospitals a chain of others fitted for the treatment of all sorts of specialties.

There are fracture hospitals, hospitals for head cases and brain surgery, those for the burned, for nervous diseases and a host of others, and in this way each man is assured of coming under the charge of the practitioner

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who makes a specialty of caring for his particular malady or injury instead of carrying it as a "side line" with his general work.

These hospitals are now carefully organized and under strict Military control. After the battle of the Marne, when the French were swamped by the wounded, they had to make use of every facility and the consequence was that a good many private hospitals were opened by well-meaning but not always responsible people and that the army suffered in consequence. In some the care was not all that it should have been and in others the lack of discipline and careful check resulted in the loss to the fighting force of a very appreciable number of men. Realizing this, the French shut out these private institutions and recognized only those which were under the three authorized Societies which go to make up the French Red Cross. With this innovation things moved in a more orderly manner and to-day the progress of a wounded man is no longer a matter of conjecture and his location and condition are

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known at all times to the War Department.

One of the Hospitals of this class which, while not a large one, must always be of interest to Americans, is what was formerly the American Ambulance Hospital at Neuilly, a suburb of Paris. This was started in the early days of 1914 by Americans then resident in Paris. It was situated in a school building which at that time was just completed and grew from modest beginnings to an institution of some 700 beds.

In addition to taking care of the wounded it served the admirable purpose of training many young medical men in the new surgery which this new method of conflict has made essential. In it our Yankee specialty of Dentistry took on a new dignity and under the able leadership of Doctor Hayes in conjunction with the Surgical service, some very wonderful work was done, and is being done, in the restoration to a semblance of something human those suffering from the terribly disfiguring wounds of the face.

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It is a little difficult in the quiet walks of peace to realize just what can happen to a man's face as the result of shell wound and still leave him alive. Alive, but a living horror to all who see him and he himself, a despondent wretch. If you can figure to yourself what a man is with no nose, with no lower jaw, or only half a one, with a face that looks like a mangled beefsteak, you can appreciate what it means to patiently build him up again almost from the beginning and turn him out, scarred and seamed to be sure, but not an object that children would run from screaming. It is a work that calls for infinite patience, both on the part of the operator and the wounded man, for this is not done at one fell swoop, but means many weary months and sometimes as many as twenty or thirty operations. They borrow pieces of rib and bits of shin-bone and make new noses of them; they twist and pull and coax adjacent tissue until it covers the gaps and they bridge in vacant areas by skin grafts until finally the unfortunate wretch comes forth

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somewhere in the shape that God made him. It is the very antithesis of war; an upbuilding to meet a tearing down: construction versus destruction, and is a work that any member of the profession cannot but regard with pride.

I had been one day at one of these interesting if sanguinary operations and at its conclusion went into one of the "face wards" to see the progress in a case which I had seen operated on some time before.

In one of the beds, splinted and bandaged, I noticed a cheerful looking mulatto, with the French War Cross on the left breast of his gray pajamas. His white teeth flashed in laughter, and he was chattering away in rapid "Poilu" French to his neighbor, a youngster who looked as though he might have come from the South of France—the "Midi"—that land of sunshine and fair skies—the country of "Tartarin of Tarascon."

Of course it is absurd, but I think we of the United States are apt to assume that all the Sons of Ham are compatriots of ours. We do

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not quite realize that France's colonial holdings have given her also a proportion of the dark aliens. Anyhow, the brown-skinned soldier looked so much like home that, after wandering by his bed several times, I wheeled on sudden impulse and, standing at the foot, said, "Boy, what's your name?" He ducked his woolly head and with a flash of teeth, chuckled in a tone that meant some place south of Mason and Dixon's line, "Sam Brown, suh, Sam Brown, tha's ma name."

I walked around and sat down in the chair between him and his French neighbor and continued my investigations. "For the love of Mike, Sam Brown, where did you come from, how did you get here and what are you doing?"

"Me, Major? Ah come fum Galveston, Texas." (I knew he did, or he would not have put the accent there.) "Come ovah on a cahgo boat, 'bout a yeah and a half ago, and I 'listed up with the French ahmy and I'se a sho-nuf Poilu now and they done give me the Croix de Guerre. Yas, suh, I'se a French soldier."

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And I told Sam Brown that I had been stationed in his Galveston when I got my order to come and see what he and the other French poilus were doing, and we chattered of people there, and he told me how he was wounded on the Somme ("Sum," he called it), and the little French neighbor from the Midi chipped in, and we gossiped away, sometimes all three in French and sometimes just Sam Brown and I—two soldiers from the Great Republics—in plain American, *not* English, and the little Frenchman from the Midi told me what a good "Copain" Sam Brown was, and Sam returned the compliment, and we three had a delightful twenty minutes. I left them money for cigarettes, wished them both "Bonne chance" and left as Sam Brown assured me, "Ef you hadn't a spoke to me, Majah, I should have spoke to you, 'cause even if I *is* a Frenchman, that unifohm looks mighty good to me."

In answer to my inquiries, they told me that Sam Brown was a brave soldier and a cheerful patient.

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That is one of the saving graces of these collections of maimed and injured men—always somewhere in the atmosphere of pain patiently borne, of suffering endured without a cry—there is a rift in the clouds, and the sunshine of human interest, of gentle comedy breaks through to turn to gold for a minute the red stains on the bandages.

It is not hard to learn a lesson in cheerfulness from these wounded men, and I can think of no better cure for the man or woman who deplores his luck than to watch some man lopped of an arm or a leg, as he patiently tries to make the best of his artificial substitute and with a cheerful grin swears queer good-natured soldier swear-words, both at its stubbornness and his own clumsy efforts.

Suppose, Mr. Man, that the next time you are peevish because James has left a bit of shell in your breakfast egg, you figure on what it would mean if you had no James—only an awkward left hand and arm to do his job.

I think one of the best examples of the un-



MUTILATED SOLDIER LEARNING TO ENGRAVE WITH AN
ARTIFICIAL HAND.



SOLDIER WITH DOUBLE AMPUTATION OF THE ARMS, SHOW-
ING HOW MUCH MAY BE ACCOMPLISHED WITH THE
ARTIFICIAL HANDS.

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failing spirit of these wounded men was at the "Hôpital du Pantheon" over on the left bank of the Seine in Paris. It was in the old quarter and in a building that had for many years been used for Hospital purposes.

I was invited there by a surgeon renowned for his skill in surgery of the head. The case was a man who had been wounded by a high explosive shell and had a fragment of the shell casing in his brain, in the middle line and about halfway from forehead to the back of his head. As a consequence of this unsought intruder he was developing a paralysis of arms and legs and it was considered essential for his well-being that the fragment be removed.

He was a husky peasant, and aside from the halt in his gait as he entered the operating room and the look of embarrassment at the sight of the medical men there assembled to see his operation, there was little to differentiate him from the average "Poilu" one sees on the Boulevards of Paris. Due to the fact that this was an operation on the brain he

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did not have, in his ordeal, the benefit of ether or chloroform. It was, with the exception of the physically deadening effect of the cocaine, what one of our leading papers would denounce as "vivisection."

He came into the operating amphitheater with proper dignity, was seated at the end of the table on a stool, his head bent forward and lest in a moment of uncontrolled nervousness he might rebel, his wrists were lashed and he bowed his head forward on the table.

The whole thing was done under local anæsthesia (cocaine or one of its derivatives) and he was entirely conscious during the whole time of the operation. This consisted in opening the skull, cutting through the membranes of the brain and then extracting the fragment of shell which had been the cause of his trouble. This fragment was in the brain itself. He was perfectly cognizant of what was going on during the entire time of the operation, but he never moved: whether he was in pain or not, no one save he himself knew. When everything

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was completed and he raised his face, streaked with the blood which had run down from the wound in his scalp, the first thing he did was to turn to the Surgeon who had operated on him and say with steady quiet courtesy, "My Doctor, I thank you a thousand times." A little later he walked, serene and unshaken, back to his ward and his bed. It seems to me a hard task to beat down a National spirit which is made up of such men as this, and he was by no means exceptional in his quiet fortitude. I am glad to say that he made a perfect recovery and has probably long since gone back to that Hell of the front lines, there to do his bit and wait what fate shall bring him.

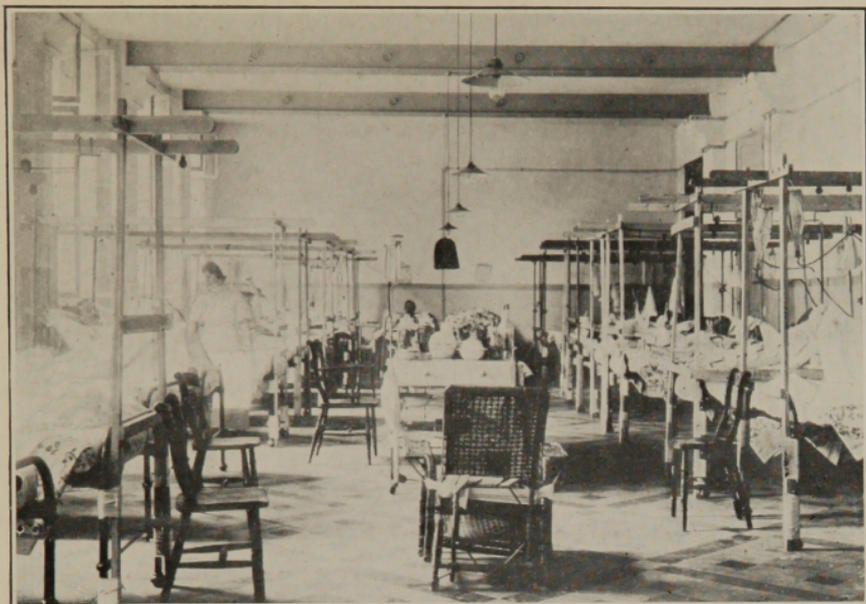
I spent three weeks in another hospital in a little town not a great way from Paris, on the Seine, where almost all the work was that of the treatment of fracture cases. "Fracture"—a broken bone, brings to most of us the picture of a distorted limb, but not as an invariable accompaniment, torn and mangled flesh as well. Fracture as the result of artillery fire means

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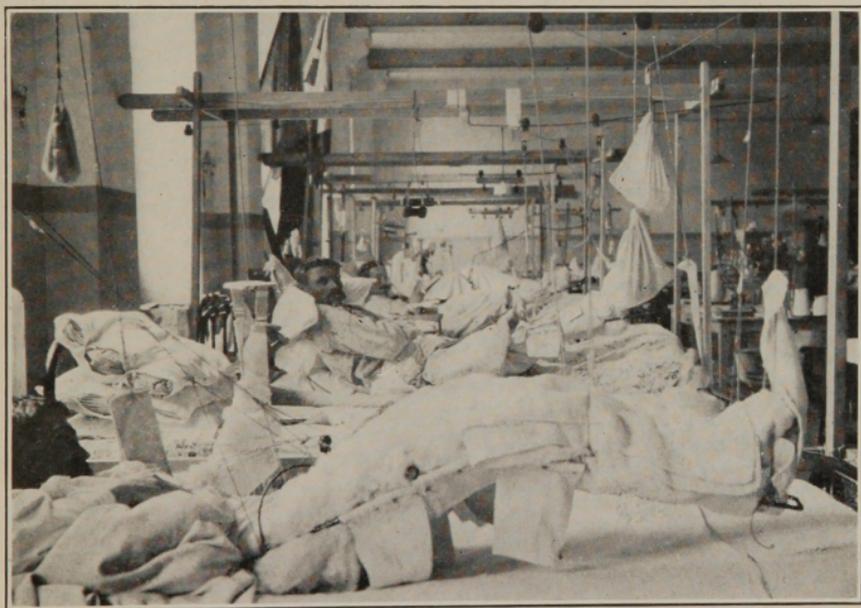
always this damage to the flesh and almost invariably an infection of some sort. And just as the fracture itself is complicated, so in the same ratio is the treatment. It needs skill and ingenuity and patience and a large amount of that sixth sense which God has given to women—intuition.

Dr. Joseph A. Blake presided over this Hospital and in his constant dealing with this class of injury had evolved an ingenious and most efficient system of splints and suspension which made for quick and satisfactory healing and left the patient free of the torture of some of the older and more cumbrous apparatus.

The wards devoted entirely to the fracture cases were a forest of uprights and cross-pieces traversed in all directions by cords running through pulleys and at the ends of the cords dangled sandbags and weights like some queer fruit in this conventional grove. It was known familiarly as "The Machine Shop" and reference to the two accompanying pictures bears out, I think, the aptness of the nickname.



FRACTURE WARD IN BLAKE'S HOSPITAL, COMMONLY KNOWN THERE AS "THE MACHINE SHOP."



A FRACTURE WARD.

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The cases which reached this hospital were of the class I have referred to—those which were either hopelessly out of the game, or would require more than the allotted five weeks for their restoration to duty. It was also a “surgical center.” That is to say, the operating was done in this one hospital save for minor work, and the cases as they improved were transferred to one of several others in the vicinity where they finished their course and were sent either forward for further service, or back for discharge from the army. I saw here an interesting case. The man was apparently shot directly through the heart according to the testimony of the wounds of entrance and exit. Yet he walked a mile before he received his first dressing and recovered after an uneventful course. Of course it is possible that there was one of those curious deflections of the bullet by the ribs, but even so, and granting that the heart was untouched, it was remarkable that the man was able to walk the

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distance that he did and that his recovery was so uneventful.

As in all the hospitals at that time the work had been systematized so that from the time of the reception of a wounded man until the date of his transfer or discharge there was practically no lost motion.

The wounded for this particular chain of hospitals were received at —, where they came by train from the hospitals nearer the line. It was interesting to see the methodical way in which they were received and distributed. I went over to the receiving point once to see the process. A telegram had been received saying that at such an hour a train of 89 wounded would arrive. This was received long enough in advance to make it possible to determine as to what proportion of cases should be sent to each of the hospitals of the group and the various ones were notified that they would be called on that afternoon to receive so many wounded men. At the appointed time the ambulances of the group were at the station and

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Blake and other representatives to make the apportioning. The train was a "permanent" Sanitary train, made up of the short continental box cars, each one fitted with apparatus to hold eight cases on stretchers. The platform of the freight station where they were unloaded was level with the car doors so that removal of the stretchers was an easy matter.

On the cement platform were three posts, each one bearing the initial of the hospital which it represented. When the train stopped all the cases which were able to walk were herded together in one place to wait their distribution. The cases on the stretchers were brought out of the cars and placed in a long row on the platform. Each one of the wounded bore on one of his coat buttons the diagnosis tag from the front which showed what his injury was and what had so far been done for him. Blake, who was the "Médecin Chef," examined the cases, beginning with one end of the line, and decided to what hospital each one was to be sent. He stated the name of the

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Hospital and an orderly who was with him fastened to another button a tag which bore the initial of that hospital. At once two French orderlies took the litter and carried it to the post bearing the same initial, and there the ambulance orderlies collected the cases, put them in the waiting ambulances and they were carried to their destination. The cases which could walk were dealt with in the same way save that they went to the lettered posts under their own steam. There were in attendance women of the French Red Cross who gave the men coffee, wine, oranges and cigarettes.

The distribution was systematic and rapid, the process beginning as soon as the wounded were unloaded from the train, and some of those first taken off were on their way to clean sheets and good care before the last of them had left the train.

The entire process did not take more than twenty minutes and seemed very business-like and practical. It was, in reality, the "stock

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yard" method and made for an accurate and rapid sorting of the wounded.

On a man's arrival at the hospital he was first cleaned up, and then, if not too fatigued, taken to the X-ray room, where a careful examination of his injury was made and recorded for the surgeon who would receive him as an operative case. The majority of cases were not photographed, in the actual sense of the word. They were examined by the fluoroscope, which enabled the man in charge of the X-ray work to determine the nature of the lesion and to furnish such data as would be required for operation. Cases out of the ordinary run, or those which showed pieces of shell remaining in the tissues, were photographed and a chart also made showing the exact location of the foreign body. Surgery of the present time is very dependent on the X-ray, and not only on that but on various types of what are known as "localizers."

There are several types of these: one a magnet, which when brought in proximity to a piece

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of steel is strong enough to cause a movement of the fragment which is perceptible to the fingers on the part. Others which have a telephone adjustment for the ears of the operator and a probe which on contact with the shell fragment or bullet gives a distinct clicking sound, the loudness or faintness of the click indicating to the surgeon whether he is "hot or cold" as we used to say in the childhood game. From the X-ray room the wounded man goes to the ward for rest unless his case is urgent, in which event he is transferred direct to the operating theater and the necessary work done for him at once.

One is apt to think of a hospital as a necessarily depressing place, the abode of suffering and the place of not infrequent death. That is true as far as the suffering goes, not so now, fortunately, as to the frequent death, although with war wounds there is no escape from a certain percentage of fatalities. The one thing which cannot be killed is the innate cheerfulness and good humor of the French soldier.

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He may be drawn and white from the pain of a dressing or the ache of the operation, but give him time to compose the quivering nerves and his gayety comes to the surface again and he is ready to poke fun at himself or any one else—and any one is fair game. There was one youngster in the “Machine Shop,” which I have alluded to, who interested me, and I used to stop and talk to him every day in my rounds of the ward. He was laid up with a shell fracture of his left leg and right arm and was swung in a maze of pulley ropes and weights. Despite his incumbrances he was always cheery and managed to do for himself very handily. We used to chat each morning; I in my best French and he in the rapid talk of the Poilu with more or less slang intermixed. After I had known him for about a week, he turned to me one day and archly asked me, “Say, Major, what’s the matter with us talkin’ United States?” We did after that, and I found that the young scoundrel had been born in New York of French parents, lived there all his nineteen years and

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had come to France because he felt the call of the Fatherland. He had been amusing himself in a good-humored way with my imperfect French, and I suppose had been chuckling over the fact that he was as much an American as I. I daresay it amused his comrades, too. It did not at all interrupt our amicable relations and the only difference it made was that thereafter I deprived him of the satisfaction of listening to my attempts in his own French tongue.

There was, for the other side of the picture, one death in that ward which seemed sadly pathetic to me. He was a strong peasant, about forty years of age and so badly injured that at his age he had not the vitality to fight it through. I watched him go along the road that leads over the big divide, each morning finding him a little weaker in spite of his evident desire to win back to a maimed existence.

One morning I came into the ward to find his people there and to be told by the ward surgeon that he had only a little time to last. The

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Doctor had no French and asked me to do what I could to comfort the poor souls who had been summoned there by the news that their son and husband was to give the great gift for his country.

I did the best I could, and I trust that what I said to them helped a little. They were pathetic peasant folk in awkward black, with lined brown faces and hands hardened by much toil. They were dignified in their grief and made no outcry; just the dumb look of suffering in their faces as the breath halted and the laboring chest rose and fell and finally became still. One could know what it meant to them; the loss of a good son, a well-loved husband. And yet when it was all over and the poor tortured soul had gone to the God who created it, they turned to me and, with fine courtesy, thanked me for my words of sympathy, and as they turned to leave the ward the old father turned to me with his patient face, and straightening his bent shoulders, looked at me with the tears in his eyes and simply said, "Eh bien,

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Monsieur le Majeur, c'est pour la France." In spite of grief and the sense of loss they could yet realize that the life they had loved was given for a cause that was sacred in their eyes—for their country.

A hospital in a small town rather dominates the life of the village: everything centers about it and in the absence of the industry of peace times it is an important factor in an economic sense. In the village where this hospital was situated, as in all the others in France, man power was at a minimum, and among the rest the village doctor and the pharmacist had gone to war. As a consequence the good people were dependent on the personnel of the hospital for their care in sickness and for the remedies which they required. This care is everywhere freely given and in similar conditions it is as much the duty of the Medical force of the hospital to look out for the civilians as to care for the wounded. It is fortunate that it is so, for with no other help available there would be much hardship among those who had only

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to watch and wait for the return of the men at the front.

In view of this, there grows up a close relationship between the inhabitants and those who care for the wounded. During my three weeks in this little town I had a room in a quaint little French inn and in a very short time I was on friendly terms not only with the old man and his wife who presided over it, but had a speaking acquaintance with most of the people of the village. They quickly learned what my uniform was and, although at that time I was a neutral—apparently—I met with nothing save a fine and simple courtesy.

The French peasant class are as a rule a courteous people and transactions with them carry much more ceremony than that with which we endow our daily comings and goings in these busy United States. For example, the purchase of my daily paper from the old lady who kept the stationer shop was formal to this extent. I entered the shop, tipped my cap and said, "Good morning, Madame, it is a fine day."

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“Good morning, Monsieur le Majeur; it is indeed.” “The *Matin*, if you please, Madame.” “But certainly, Monsieur, and thank you.” Then I gave her a fifty centime piece and she said “Thank you, Monsieur.” When she gave me the change I said “Thank you, Madame,” and I bowed myself out with a duet of “Bon jour, Madame,” and “Bon jour, Monsieur le Majeur.” I suppose that we have not time for all that in our own busy materialistic Republic, but it lends a touch of friendliness to the minor things of life and is pleasant when you know it.

Probably one of the best known and certainly one of the oldest hospitals in Paris given over to Military use is the Val de Grace. There is some very fine surgery of the face done there by Dr. Moreston and the progress of the cases is illustrated not only by photographs at different stages, but there is in the museum a collection of masks made in wax and colored, which though grewsome in themselves are very beautifully done and illustrate very strikingly what can be accomplished in this difficult

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branch of surgery. In addition to caring for sick and wounded this hospital has other functions. The young men who have finished the course at the school at Lyons in preparation for entry into the regular Medical Corps of the Army are sent there for a final course before being sent out to active service, and, furthermore, the army nurses are also trained in the same institution. Here, also, is situated the Laboratory where the serum used to protect against Typhoid and the two analogous fevers, the para-typhoids, is prepared.

This is a very modern and up-to-date plant, and if we consider that all the men of the French army have been immunized with serum manufactured here it is easy to comprehend the magnitude of the work. At the time I visited the laboratory, in company with Vincent, who is the head of it, he told me that they were not only turning out all that was required for their own forces, but were supplying Belgium, Russia, and sending some to Italy. The serum has proved its efficiency, for since the early days of

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the war, before all the army had been inoculated, typhoid has continued to be a negligible cause of illness. That it is potent I have cause to know from personal experience, for in spite of the fact that I had gone through typhoid as a young man and that I was beyond the required age, I took the inoculation—and cursed both Vincent and his serum, for in addition to its protective power it has a very unholy “kick.” If any suffering citizen is protected against enteric fever I surely should be.

There is, near Paris, in the suburb of Issy-les-Molineaux, a hospital which is interesting both on account of the character of the injuries treated in it and from the results obtained by the treatment. It is the “Hospital San Nicolas” and in it a service has been turned over to Dr. Barthe-de-Sandfort for the treatment of men who have been burned.

There are a number of these cases arising in the Military service, and contrary to expectations, the majority of them are from other

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causes than the German "Liquid Fire." The cases treated from this cause are rather infrequent. Why this is so I do not definitely know, unless it be that those who are burned in this manner generally succumb. It may be mentioned in passing that the Allies do not view this form of warfare very seriously; they take it as a manifestation of German frightfulness and state that it has little real tactical advantage.

There were about two hundred beds occupied by the burned cases at the time that I visited the hospital at Issy and together with them were a number of cases of "Trench Foot" which were stated to do well under the treatment. Trench Foot is much like frostbite and the resultant injury much resembles it. I saw during my visit there burns of all degrees of severity, and was impressed by the apparent comfort of the method for the patients and the excellent results obtained. The remedy itself is proprietary; that is to say, Barthe-de-Sandfort refuses to disclose the formula, holding it for financial

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gain. Under the ethics of the European countries this is viewed under a different light than with us.

The treatment consists in the application, to the dried surface of the burned area, of a liquid preparation which contains paraffine and some other undetermined ingredients. This seals up the burned area and healing goes on under it with great comfort to the patient and with a most excellent final result. There is less scar resulting and consequently less deformity. Some of the completed cases were remarkable when compared with their condition on entry in the hospital.

Whatever be the ethics in regard to the treatment, it seems to me that there is little doubt that it is an effective method of dealing with a distressing form of injury.

I quote this method mainly as an evidence of what the changed conditions of modern warfare have demanded in advance in Medical and Surgical procedure. The increased skill in inflicting bodily injury has evoked a measure of in-

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geny in the science of repair, and this is manifested not only in this matter of the treatment of burns, but in the many other special methods and devices for the better repair of the wounds of war.

CHAPTER IV

THE ZONE OF THE ARMIES

As I have mentioned before, continental France is divided by an arbitrary line into two general divisions—the Zone of the Interior and the Zone of the Armies. In this latter Zone are the majority of the Military Hospitals, not all of which are subject to gunfire since this zone extends from the first lines back to the ultimate edge where the two zones join. This Zone of the Armies is further subdivided into three regions: the Zone of the Advance, which, as its name implies, is that of the actual fighting, the place of the combat: the Zone of the Rear where reserves of personnel and materiel are maintained for the reinforcement of those at the front, and the Zone of the Line of Communication, which is the traffic route by which

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these reserves are brought forward and by which the wastage is sent back for repair.

The character of the Medical service, of the Hospitals, depends on which one of the three different subdivisions they happen to be located in, the more formal as a matter of course being more removed from the actual fighting. Some of the hospitals of the latter type are of particular interest and have occupied a more or less prominent place in the public press and have come to be pretty well known in this manner to the average reader of the news. One of these is Carrel's Hospital at Compiègne.

Most of us know of Carrel: of his association with the Rockefeller Foundation; that he won the Nobel prize, and that recently he has established in New York a hospital for the demonstration of his method of the treatment of infected wounds. It would not, I presume, be good taste for me to discuss the pros and cons of his methods and as a matter of fact that is hardly a function of any writing as non-technical as these pages.

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It was my good fortune to spend some time with him in the winter of 1916 and I found my visit both pleasant and profitable. In speaking of it I quote from a running diary which I kept during my tour in France, as events recorded therein are more sharp than if I trust to a recollection blurred somewhat by the passage of two years' time and many other events which have occurred since that visit.

"The 21 and 22 of February I devoted to a vigilant and persistent pursuit of a 'Carnet des Etrangers' in order that I might have the right to come here to Compiègne.

"I finally succeeded in running it down in some Nth Bureau of the French War Office on the Boulevard Saint Germain. A 'Carnet des Etrangers' is your Passport into the Zone of the Armies. It is a little red book, in the front of which is pasted the worst possible postage stamp picture of yourself and under it inscribed a kennel register of yourself which takes you back as many generations as you can remember. The rest of the book is devoted, with French

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thoroughness, to information on every subject except how to beat an egg in hot weather and contains forms appropriate to every occasion except, perhaps, a christening. Without it you cannot go anywhere, except to bed, and you must do that within the limits of the Zone of the Interior.

“When the proper form is duly filled out, stamped and sealed by the ‘Grand Quartier General’ you can go—exactly where it says you can: if you go anywhere else you are ‘off side’ and liable to be set back and severely penalized. Also you must show it to everybody on demand, save the Fire Department, and I am not quite sure about them. I had to show mine four times between Paris and Compiègne and each official looked more suspicious than the last until I finally began to doubt my own integrity and became as red as the book each time I produced it. You see I was in citizen’s clothes, as a representative of a neutral Government, and it is hard for any Frenchman to understand why any person described as a man of Military

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rank should be concealed in a brown sack suit.

"I left Paris at 8:05 from the Gare du Nord. The morning was cold and dreary and the outlook from the train soggy and disconsolate. The Oise was bank full and overflowing and every one looked bedraggled and down at the heels. Even the red pantaloons of the old territorial soldiers who guarded the right of way looked less cheerful than they should. At Creil, which was at that time the dividing line between the two general Zones, a very thorough canvass was made of all passengers on the train to make sure that no unauthorized person was irrupting into forbidden territory.

"I arrived at Compiègne at about 11 and came up to the hotel followed by a hoary old Frenchman who puffed along with my luggage and had such a luxuriant growth of whiskers that all he needed was three decoys and a cup of water to make him look like a duck blind. Compiègne has been shelled by German 280 and 320 mm. guns from time to time and there are ruined houses to bear testimony to the fact.

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“Established at the Hotel Palace, I went to take my letter of introduction to Carrel at his hospital at ‘Rond Royal.’ This was in the piping times of peace a hotel, but like many structures of that kind it has changed its sphere of usefulness as the normal life of the state has been turned upside down. The hospital is not a large one, having a capacity of something like a hundred beds, and Carrel does not claim for it any great value as a large factor in the care of the wounded. It is in reality his laboratory, where with the wounded for his material he is working out the best method, in accordance with his views and experience, of putting them back again in the minimum of time, healed and fit for more of war’s alarms. The place is partially supported by an appropriation from the Rockefeller Institute, so that things are on a more easy scale than if it were dependent altogether on the resources of sadly tried France.

“There was plenty of everything: beds, nurses, linen and all the essentials which make for the comfort and well being of the wounded.

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I could not but feel that the soldier who was brought here to be cured of his hurts was particularly favored.

“Carrel himself does no operative work. He is the general administrator of the institution and has a supervising eye on the cases and the progress of the method which he is advocating in the disinfection of wounds. Briefly, and not too technically, the ‘Carrel-Dakin’ method of treatment—sterilization, he calls it—of wounds consists in the use of a solution of hypochlorite of soda. It is a use of what is analogous to the familiar ‘Javelle Water’ which we use to take spots from our clothes and stains from our hands. But in the use of this, according to his method, there is no haphazard employment of the chemical: he has determined exactly and precisely the percentage of the ingredients which gives the best result and any departure from the established proportion will not produce the end aimed at.

“The primary step in the process consists in what the French term, ‘debridement’. That

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word, if you look it up in the French dictionary will be given as 'taking the bridle off a horse'. It refers, as the French surgeons employ it, to an extensive wound of operation. They open everything up wide, clean out all foreign bodies and torn tissue and clots of blood and leave no hidden corners for the malicious germs to linger in. It is rather startling at first sight, but if one has any Jesuitical tendencies he cannot but believe after seeing the results, that 'the end justifies the means.' Once opened up and cleaned out, the wound is kept open by gauze packing and subjected to a constant bath of the Carrel Solution. This is fed into the wound by rubber tubes which search out and go into all the ultimate nooks and crannies in order that there may be no area which is not constantly bathed by the hypochlorite. Dressings are at first made every day and as the wound becomes progressively more free from infection, at longer intervals. Cultures from the wounds are taken every day at the dressing time and these as well as the temperature and the clinical symptoms .

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are the index of progress. When the culture is negative, that is to say, when no bacteria are found on microscopic examination of the slide, the drainage is removed and the gaping wound brought together by strips of adhesive tape, and it promptly heals, leaving only a thin red line to mark the injury. Of course in joint injuries and extensive loss of bone there is more marked evidence than this, but in all the cases I saw during my visit healing was prompt and sure. The question of the adaptability of this method for all wounds is not one to be discussed here.

“Eight in the morning is the dressing hour and each day I am there to watch the work and observe the progress of the healing. The dressings are most carefully done; not entrusted to the nurses, but done by the surgeons themselves with due and strict regard to modern surgical requirements. It is interesting from a professional standpoint, albeit a little sad, this patient dressing of the pathetically patient wounded. There is one for whom I feel a particular sym-

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pathy. Robert Deviennes, he is, of the 417th Infantry. He may be nineteen, not more: a well built, good looking slip of a French lad with dark hair and eyes, a straight little nose and a facile mouth which I think must have been merry until pain and constant suffering pulled the corners down into a piteous droop. On his left leg and thigh he has four wounds varying in length from four to six inches; on the right leg, the ends of all his toes are shot away and on the same thigh, underneath, is a wound about fourteen inches long, open and showing the muscles and fascia. If you want to know what such a wound looks like, go buy a beefsteak big enough for a family of four and lay it on the back of your thigh and then try and realize that it is a tender, quivering area. He has two other wounds that I cannot describe.

“Each morning the surgeons pull gauze out of and push gauze into all those eight wounds and sponge them and dress them. And Robert Deviennes, of the 417th Infantry, grips the sides of his white iron bed and the dark eyes

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close and the drooping corners of his mouth come up to a straight, set line and the olive color of his face goes a little gray while drops of sweat stand out like tears from a tortured system. But Robert Deviennes, of the 417th Infantry, does not whimper, for he is not a child, but a soldier of France, and he knows with the knowledge of his nineteen years how to bear his cross like a soldier. And these clever French surgeons who poke and prod his quivering flesh are making him whole again and before long he will take his knapsack and his rifle and carry his scars back to the trenches to chance other shell bursts which may send him back to the hospital at Rond Royal, or close the brave black eyes and write 'finis' across the book of his young life. I wish I might be sure that I could bear so uncomplainingly the ills that cannot make him cry.

“They—the wounded—are a singularly uncomplaining lot; it is the exception for the pain of dressing to elicit even a moan. The hands grip tight shut and their faces twist in silent

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protest, but they keep their breath to breathe with and I have never seen one flinch or move the wounded member, no matter how keen the pain. I think that on the average, they are better about it than our men. Why, I do not know, for I am sure they have no more courage.

“There is a pathetic dignity about the wounded that is hard to describe. Per se, the mutilations are grotesque, but one seems to see through them and beyond, to the love of country that has made them run these risks, and that, I think, helps sustain them through the tiresome painful days while patient nature fills up again the gaping holes and seals them with the flaming scar tissue which is the Red Badge of Courage of these, the ‘Blessés.’ And so the man I saw this morning with one leg gone just below the knee and the other just below the hip did not suggest merely the crippled remnant of vigorous manhood, but the exponent of fearless self sacrifice—of duty done at the expense of self and regardless of life or suffering.

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"This afternoon I put on a suit of olive drab uniform and went over to a General hospital about a mile and a half outside of Compiègne. As a plain citizen, and so dressed I am tolerated, but to use a colloquial expression, I do not 'cut much ice'. To be anybody nowadays in embattled France you must have better credentials than a brown sack suit and an alpaca umbrella. I found that I was taken much more seriously in service dress than as an unassuming citizen of the Great Republic.

"I was presented to the 'Médecin Chef' and he showed me about the institution and answered my questions when he could understand them. It was 'horse and horse' anyhow, for sometimes when he understood the questions, I did not understand the answers. He was cheerfully polite and assured me that my French was quite creditable, but I have a sneaking idea that he had his fingers crossed and was making mental reservations all the time he was complimenting me. The hospital had formerly been a military barracks and was a big affair of scattered brick

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buildings which were being adapted to hospital use. The process of transformation had just been started and there was much to be done and my French doctor shrugged his shoulders and deplored that I could not have made my visit a little later when he had been able to evolve some sort of order out of the general chaos which was an unavoidable accompaniment of the change. He said that there was an insufficiency of many things, which is not to be wondered at when one considers the burden that the State has had to assume in the care of those who have been hurt in battle. It is the invariable and inevitable rule apparently that no government can be up to par in the treatment of the wounded. It seems that no matter what provisions are made they always fall more or less short of meeting the conditions with absolute satisfaction. The existence of the Red Cross is evidence of that fact: given perfect management, their function would be nil.

“There were about 1,400 sick and wounded in the hospital that day and I was told that the

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ultimate capacity would be nearly double that when everything was in order. The death rate at that time was 2% for the Surgical cases and 5% for the Medical.

“It rained all the time I was there and the impression of the rows of brick barracks was rather cheerless and I came away with the conviction that I should rather win back to health in the ward at Rond Royal than in this huge home of the wounded.

“I came back in a big Military motor driven at the usual rapid rate by a whiskered ‘Poilu’, who told me among other things, that he was convalescing from a wound and soon expected to go back to his regiment and the front. He seemed cheerfully indifferent about it and thanked me politely for the *pour boire* which I gave him ‘for the wounded’. I am inclined to think that he put an entirely personal construction on that phrase in consideration of his own hurt, and I have also a sneaking suspicion that although Major Church in Service Uniform rode home in a military machine, Major Church

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in civilian clothes could have walked in the mud and be damned to him.

“Madame Carrel has donated the band instruments to a regiment raised here and this morning we went down to the Place to see the regiment march away to the front and the trenches, and many of them, I suppose to face their Maker in another world. The music was spirited and the men looked clean and rested and very workmanlike in their horizon blue with full kit and rifles with the wicked long French bayonet across their shoulders.

“The shuffling throb of their feet on the old French cobblestones beat out an accompaniment to the blare of the band and after it had passed, with the head of the column, beyond hearing, the beat of the marching tread sounded like the pulse of the heart of France; steady, strong and determined. There were about two thousand of them and they made a long line as they filed in column of fours through the old square and past Joan of Arc who stood with

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her bronze hand raised to salute these soldier sons of hers.

“There is something about the whispering rhythm of a body of marching men that always makes my heart beat a little faster. It may be the association, but there is a swing and a time to it that is almost music in itself. The stamp of heavy shoes on earth or stone marks the bass of 4/4 time: the brush of sleeves against the sides, the creak of leather gear, the mutter of low talk and soft laughter are the air in treble, and the tinkle of metal on metal, of bayonet and cup, make the arpeggios, the running grace notes of this unwritten tune of the fighting men. After they had all passed and were only a soft echo in the distance, Doctor and Madame Carrel and Paul Uffolz, who, in spite of the strange name, wears the French blue and is ‘Médecin Principal Première Classe’ and Surgeon of the — Corps which is stationed here, came up to the Hotel and had luncheon as my guests. It is interesting to know intimately a man so eminent in his pro-

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fession as Carrel. He is short, full figured, well set up and fair. He is quite bald and has keen blue eyes which behind their heavy lenses are gravely thoughtful or mirrors of mirth as the discourse changes from sober topics to lighter vein. He is clean shaven and has an attractive mouth which expresses his mood equally with his eyes. It is a strong face and an attractive one.

“We talked of many things;—not the ‘ships and shoes and sealing wax and cabbages and kings’ of Alice in Wonderland, but of Medicine and the wounded; of Military procedure as it affects our profession; of French politics and American necessities, and of ‘T. R.’ whom they all admired. They talked in slow French which I understood, and in rapid French which I did not, and Dr. and Madame Carrel to me in delightful English with a charming French accent. It was altogether delightfully informal and human and I felt not at all like a ‘looker on in Venice’ but as though I had been quite admitted to the circle.

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“All day yesterday the sky was gray. The wind swept in gusts from the North and whirled the snow in glittering ‘dust devils’ across the bare expanse of the Place which stretches from my window over to the great Château de Compiègne which faced me grim and inscrutable in the bleak winter twilight of northern France. The Château is now a Military Hospital for medical cases. The tri-color hangs over the gate and French soldiers are on guard in the courtyard, and sick in the interior. And so the summer palace of the kings and emperors has come under the rule of the present master of France,—War, with all its stern necessities to satisfy. I wonder if the shade of the Empress Marie Louise flits through the salons which once were hers, but now are wards for the descendants of the soldiers who helped to place in power her liege lord, the great Napoleon? If it is cold here in Compiègne, I wonder what it is out in front twelve kilometers away where ‘shelter’ means protection against sudden death and not from cold: where light comes at

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night from star rockets and the angry red of shell bursts: where men stand in frozen mud, sleep in caves and I am sure cannot be ever warm. At twelve I was wakened by the roar of iron tires on the cobbles of the square in front of my window. I got up and looked out, but Compiègne is dark at night with the blackness that seeks immunity from hostile air attack and I could only listen and guess. I know it was transportation, and I think there was artillery and it was all going to the front. It was nearly an hour in passing and as wagons make about two miles the hour that would mean a good sized convoy. At six this morning I was waked again by drums and trumpets and got up to watch with sleepy eyes another regiment file out up the fascinating little street which is the way to 'the front' and which is at present barred to me. About eleven another convoy, made up almost entirely of Sanitary wagons, stamped with the Red Cross, rumbled out and all afternoon stray wagons and automobiles have been dodging into the little street,

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bound,—goodness knows where. And my 'Carnet des Etrangers' sends me home to Paris again to-morrow. Whether this is a normal movement or an extension of the action raging at Verdun I do not know."

Another Hospital, equally well known with Carrel's is that which is administered by De Page, at La Panne which is in the little remnant which remains of Belgium on the North Sea. De Page's Hospital is a larger plant than the one at Compiègne and is universally admitted to be one of the best on the front. It is situated within easy gun fire of the German lines but up to date has not suffered very severely, although both shells and aeroplane bombs have fallen on it. I had the pleasure of visiting it in 1916 and came away impressed, as I am sure all do who visit it, with the good class of work done there and the completeness of the institution. There have been numerous descriptions of this hospital published and I am afraid that if I undertook the same task I should duplicate what has already been well

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done. La Panne in itself is merely a large amount of sea sand, spread in a beautiful broad beach along the ocean front and back from that piled in irregular dunes and sifted in a fine powder through the streets of the village to clog the footsteps of the pedestrian. The Hospital has as its nucleus the Hotel Ocean, a typical summer hotel, and about it are clustered the wards and other buildings which go to make up the total of this institution. Due to the contour of the ground, it has not been feasible to build a number of small wards, and so there are several of 100 bed capacity. These seem unduly large to one accustomed to the normal capacity of thirty or forty, but there seemed to be no difficulty in the administration, and the wounded get well in them, which is after all the principal and desired function of any unit of this kind.

As an evidence of the completeness of the plant I may state that De Page maintains in the hospital, as a part of it, a very complete machine shop presided over by competent

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mechanics, and that they not only repair surgical instruments and appliances which are used up or damaged in service, but they also make new ones and exceedingly good ones too. This is all done from the raw material and is a great help inasmuch as it obviates the necessity for ordering from an outside source and the delay and uncertainty of delivery under wartime conditions. The same orderly routine is in evidence at La Panne as in any of the well arranged and well managed hospitals on the Western front. The wounded come in to a receiving ward and follow a definite channel in accordance with their needs. It is what I have already referred to as the "packing house system" and is based on the division of labor; each place is charged with certain duties and on completion of them sends the patient on to the next section.

De Page ranks probably as the foremost surgeon in Belgium and has associated with him a corps of skillful colleagues and assistants and a competent nursing force. At the time I was

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there a certain proportion of this personnel, both Medical and nursing, was made up of Americans, under the auspices of the Red Cross, and in this way a leaven of our own people was being instructed in the ways of the new surgery of the war thus to serve as a factor in spreading this knowledge through the body of those who are now to go and take their own places with our own fighting force.

On a Sunday afternoon while I was there a conference of the Medical Officers of the Hospital and of the surrounding district was held in one of the large buildings adapted to the purpose. There were about two hundred and fifty present; Belgian and French, and I felt in a decided minority as the only representative of the United States Army.

The lecture was by an eminent Professor, from Ghent I think, and his subject was "Evolution" but truth to tell I was more interested in watching Queen Elizabeth of Belgium, who sat about four feet from me, than in the fact that I might have been developed from some sort

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of a prior form of protoplasmic life. She is small, sad faced, rather good looking and dignified, as I suppose all Queens are. She reminded me a little of Maude Adams. Alas, I did not have an opportunity to meet her and I suppose I shall never be so near another Queen. She has been much interested in this hospital and has herself nursed there. In addition to the Hospital at La Panne there is a large bath establishment and Laundry which works for the Belgian Army. The bath house provides 1,500 tub and shower baths daily and any one who has ever been in the trenches will know what a factor to comfort and well being this is to the dirty wretch who comes back to the rest camp thoroughly dirty and also, alas, generally thoroughly inhabited.

The laundry works for 75,000 men and washes 16,000 pieces daily. When you consider that in addition to the washing, a large proportion of the clothing has to be disinfected, —de-loused— to put it plainly, this is no mean task.

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This keeping an army clean is a problem in itself and many solutions have been tried, none of which combines all good features and no bad. The large establishment cannot of necessity be placed very close to the lines for fear of demolition by hostile gun-fire. Smaller units of the kind are a proportionately greater expense than where there is chance for systematic division of labor, as there is in the larger type. Hand work is slow and uncertain and of course transport to laundries situated in the back areas involves the same old question of transportation. One thing has come to be established in regard to this work and that is that there shall be a community of underclothes and in a measure of outer garments too. They do not undertake to deliver to the individual the things he takes off. These are started on a journey through the machinery which shall eventually leave them clean and mended if need be, and the man who has cast them from him finds when he has emerged from his bath, others of the same type which he substitutes for his

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own. Whether that will work out with our men who are given to individual fancies in regard to what they wear under their uniforms remains to be determined. The system is practical in that it makes for little delay in providing the man with fresh clean linen, and as these men are accustomed to a uniform type it does not make much difference to the individual unless some luckless runt may happen to draw the apparel of some one twice his size and girth. In that event however there is chance of appeal for a reduction or extension, as the case may be.

I spent the night of my going and of my returning at Dunkerque, in the Hotel des Arcades which is on the Place Jean Bart. The hotel was at that time a mute evidence of the pernicious activities of the Hun and most of the windows and mirrors had given up their shining lives to the fierce bursts of shells or bombs. Fritz bombed us both nights I spent in the queer little town but did little damage on either occasion as the French planes and the

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anti-aircraft guns drove him away before he could accomplish much. Most of my visits to outlying towns near the front were synchronized with Hun air activity and eventually I felt rather slighted if I were not awakened some time during the night or the gray hours of the morning by the combined racket of bombs and gunfire. I had the doubtful pleasure of being bombed three times in one night in one town and distinctly resented what seemed like an entirely gratuitous interference with my night's sleep, for it is next to impossible either to go to sleep or stay asleep with the racket of an air raid in progress. There was one air raid which did not result entirely in damage to the French. In a certain town, not far removed from the front lines and within easy bombing distance, there had been several attacks directed at the Post Office which, under the French system of Governmental control, comprised the telegraph as well as the service of the mails. They got it, I think, on the third night's try: got it good and plenty. I was in the town the next morn-

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ing and the remains of that Post Office were scattered all over the street and the entire building was a disreputable pile of crumpled masonry and twisted iron. The French Officer with whom I looked over the ruin admitted that Fritz had mussed up their Postal service for a day or so, but told me with a cheerful grin that they had had the foresight to install the said Post Office in a building owned by G. H. Mumm who was then looking through the wires from the inside of an internment camp for enemy aliens and that any material loss for property destroyed would be a matter of regret to him and not to any good son of France. I confess that I did not feel the amount of sympathy for Mr. Mumm that I might have if he had not always insisted on so high a tariff for his product.

There are a number of hospitals of the type of these two located in the Zone of the Armies. Many of them are within range of bombardment, but none of them are located so that they will be exposed to constant shell fire. It

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is necessary to have them as close as is consistent with reasonable safety, for I have stated that it has been proved that a man's chances in the present war are much better if he has opportunity for prompt operation than if he has to be transported for a considerable distance with the attendant delay. The French have established, also, special hospitals for the treatment of particular injuries and presided over by men who are specially skillful in the treatment of these conditions. In addition to receiving and caring for the cases themselves, these institutions serve as schools for selected Medical Officers who go to them for instruction and then return to their Corps or Division to act as supplementary teachers to the personnel therein. I saw a unit of this kind given over to the care and treatment of fracture cases and, in addition to the actual surgical work it was turning out, men who by reason of the instruction received there were specially qualified to carry on the work in other localities.

Still nearer to the front are units of another

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kind: the Ambulances of the First Line, and the Evacuation Hospitals. In the first of these one sees a different class of cases than those encountered at a greater distance from the fighting. Here the blood is fresh, and it is in these that the desperate cases have their chance to win back to some sort of life, or finish forever the uncertain career of the fighting men.

In 1916, while the Crown Prince was still butting his stupid head against the iron wall at Verdun, it was my good fortune to inspect some of the Sanitary formations in this hard fought sector. At that time, as every one knows now, the replenishment of the forces about Verdun with men and supplies was carried on by means of motor transport over the road from Bar-le-Duc—the “sacred road”—as it was termed. My pass took me to Bar-le-Duc and there I had to have my papers countersigned and send the motor for a supply of gasoline. While waiting for its return I stood on the corner in front of Headquarters and watched the transportation lumber by. I was impressed

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by the apparently never ending stream of trucks which thundered along in double line, one coming from the front and the other going out. As a matter of satisfying my curiosity I held my watch and timed the passing. As I stood there counting, my French officer guide came up and after waiting a moment said to me, "And how many do you make them?" "One every fifteen seconds each way," I answered. He told me that if that was the case they were running on schedule and that if I had stood at that corner for the previous three months, watch in hand, I should have found the same rate of travel, night and day. It is about forty miles from Bar to Verdun and one can see what that means with a double line of trucks running at 15 seconds' headway night and day. It seemed as though all the transportation in the world was rumbling up and down that road. While waiting for the return of our machine I witnessed an incident which impressed me and gave me a clear idea of the cheerful loyalty of France to her soldiers.

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Many of the returning trucks carried loads of "poilus" coming back from the front for their period of rest and recuperation. They were stained and worn, covered from head to foot with the white, flour-like dust which covers everything where the wheels of the camions grind the road to powder with their ceaseless turning; but withal they were a cheerful, merry set and apparently not too tired for jest and laughter. The line halted for a minute and a woman leading a little girl by the hand passed in the rear of one of the soldier laden trucks. They all hailed her in voluble French and she and they tossed the ball of badinage back and forth for a few brief minutes and then as the procession started again, evidently in answer to an appeal and to outstretched hands, the woman reached in her basket and tossed up to the dusty soldiers one of the big French loaves which are such a staple of peasant sustenance. They cheered her as they rolled away in their aura of golden dust and she and the little girl, both clad in black, went their way smilingly

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and evidently with no regret that a goodly portion of their supper had gone to the defenders of their homes.

The ride from Bar-le-Duc on towards Verdun was more or less of an education. This constantly traveled highway was broad and well kept—for heavy transport at least—but the smooth surface had been ground off by countless solid tires. We passed a number of busy steam rollers and all along the entire route, within speaking distance of each other, were men, the older men, patching and repairing this artery of travel. They stood with their shovels and rakes and at the least sign of disintegration in the portion which they guarded they threw in a shovelful of crushed rock, hastily leveled it with their rakes and the steadily tramping trucks beat it down for the final repair. At every turn, or crossing, and at the entrance and exit of each village, soldiers with long clubs were stationed, the military police of this busy road. Of course there were signs; signs with French thoroughness which

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told you exactly what you could or could not do. On each side of the road, as far as the eye could see, were stacks of supplies: supplies of every description and every conceivable sort. And all the ground out here was raw, and trampled by foot and hoof—and a welter of mud. From one hill I counted ten captive balloons, “sausages” hanging against the gray sky.

We went first to D——, a village where one of the First Ambulances was located. Near it were parked the automobiles of one of the sections of the American Ambulance which was busy evacuating the wounded from this always busy sector. The hospital itself was located partly in the Parish house of the church and partly in tents in the yard. Cases were brought to it direct from the trenches, less than two hours away. The surgeon who was in command was a man well known in Paris and he looked tired and strained as he showed us over his establishment. He said that he had been at work here for some months and that the duties were exacting, which I could well believe. He

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was there with one other surgeon as his assistant and between them they managed about forty operations each day. With me was a member of the American Relief Clearing House which did such good work for the French and he asked if there was anything that could be furnished which would make work easier and add to their resources. Indeed there was. Although they were as well supplied as possible, there were a number of things which would add much to the efficiency and he named some of them—a larger sterilizer for dressings, certain instruments, and as he found that his needs did not appal my friend he added to his list, growing more cheerful each minute at the thought of this unexpected help. I may as well state here that all the things he craved so wistfully for the betterment of his wounded were shipped to him with commendable promptness and I have no doubt that he profited by them. With a more cheerful mien he showed us through his little hospital. There were wounded everywhere: on the operating tables for operation or dressings; on

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litters on the floor waiting their turn and in cots in the tent wards.

Some of the wards were comparatively cheerful; filled with those who would soon be well enough to go and take their places in that inferno so short a distance away. Two were not so cheerful. One of them housed the gangrene cases of which the less said the better. I knew what it was before I went in and the peculiar, distinctive odor is one that cannot be mistaken, nor readily forgotten. The other was given over to the hopeless ones who had no chance to live; only the hard luck to fight out there the brief interval of tortured life left to them. There were two sheeted figures in a corner who had not yet been carried away and in the little time I was in the ward another died. As we came out the doctor stopped by a bed where a man half sat, half lay against the breast of a tired orderly. His whole head was swathed in red stained bandages and he beat stiffly on the covers with his hands and called something in a muffled monotone which they told me was

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meant for "water." Both his eyes and the most of his face had been shot away that morning and he could not swallow. The doctor ordered morphine for him and I was glad to come away. They told me that the shell wounds were very bad and showed a tendency to develop rapid and fatal gas gangrene, due presumably to the ever present mud which infects all wounds. The hospitals of this class count among the cases they treat many that one does not see in those farther back, since it is to these that the non-transportable are brought for such operative work as may be advisable or necessary. The consequence is that they are much more harrowing than those which treat men who have recovered from the first shock of their wounds and presumably have a fair chance of being restored in some semblance of their original selves. The roar of the guns was constant here and some shells dropped near, but none in our immediate vicinity. They told me that a number had fallen in the grounds occupied by the hospital, but that so far there had been no casualties. The

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ambulance was situated some four or five kilometers from Verdun and therefore in easy gun range of the German fire. It was, all in all, a sad and rather depressing place and aside from the professional interest there was nothing save an unjustifiable and morbid curiosity which was a valid reason for a visit to it.

This type of ambulance is normally a mobile unit and travels with the division to which it is attached. In order to make provision for the cases which cannot be moved, the non-transportable wounded, it is possible to immobilize such of them as may be necessary and by the addition of a further section one can be turned from a unit designed merely for the temporary care of the wounded to a First Line Field Hospital of the type of the one I have described. When the necessity has passed the additional section is detached and the normal unit takes on again its mobile function.

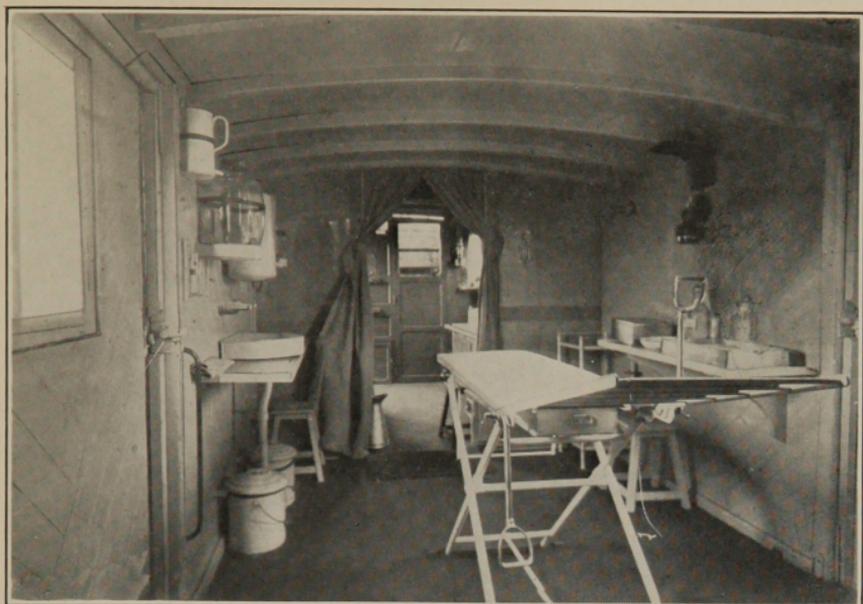
Near the Ambulance at D—— there was another first line unit which has come into existence since the commencement of the present

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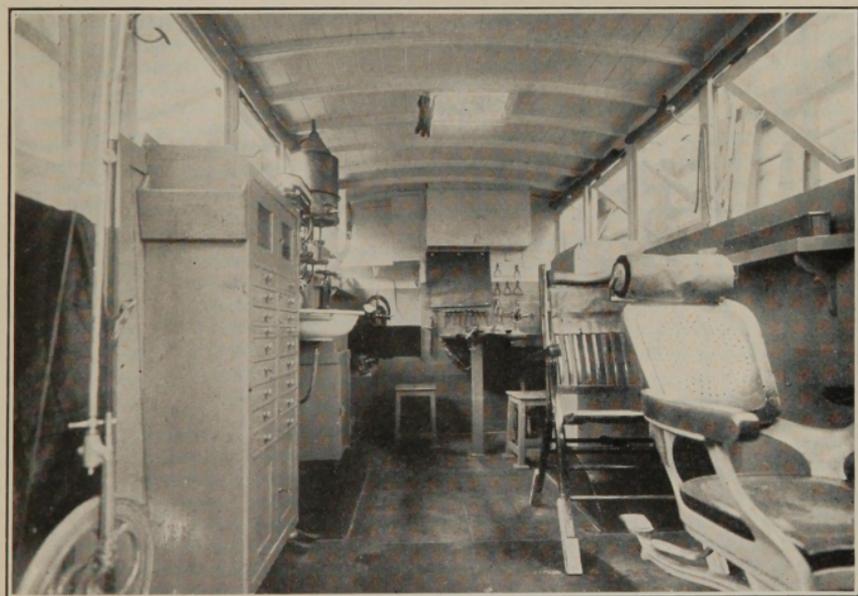
war. It is known as the Automobile Surgical Ambulance, and was designed with the object of meeting the condition which I have several times referred to, namely the prompt and thorough operative care of the wounded. The Ambulances of this type are presided over by a Surgeon of proved and special surgical skill and the personnel is more generous than that provided for the ordinary first line Ambulance. They are designed for the care of serious cases and none others are supposed to be sent to them. They are self contained units and all their material is packed on trucks so that they are available for any section of the line where the fighting is heavy and their need imperative. They are ingenious in their compactness and have proved useful in the solution of a difficult problem. One of the trucks is fitted with apparatus for the sterilization of instruments and dressings and another runs an X-ray outfit, either in the truck itself, or by the extension of the wires, in a tent, or a building if there be one which can be utilized. In addition to the X-ray

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current, sufficient power is generated to light the operating room, so that work may go on uninterruptedly night or day with good illumination. What an advantage this is, any of my professional brothers who have stumbled through intricate operative work to the flickering illumination of lamp or candle, can testify. In addition to the paraphernalia necessary for operations, there are several knock down barracks which can be set up in little time and used to house the wounded. In addition there are tents which can be used to extend the capacity and with these resources the unit can care for a very appreciable number of wounded and give them the benefit of prompt and thorough surgical intervention. When possible, the French set these units up where there is a house of some sort and thus get the benefit of better construction and housing than if they depended on the portable shelter, but they are designed to be self supporting and to function irrespective of any permanent habitation. There was no available shelter for the one I



OPERATING ROOM ON A "SANITARY TRAIN."



INTERIOR OF A FRENCH DENTAL AMBULANCE. THIS IS A ROLLING DENTAL OFFICE, COMPLETELY FITTED AND MOUNTED ON AN AUTOMOBILE TRUCK.

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saw near D—— and it was working in the barracks and tents.

The operating room was painted white on the inside, well lighted and there were four or five tables presided over by a proper quota of personnel. Here, as at D——, there was an abundance of wounded. All the tables were occupied and there was a row of bandaged figures on litters on the floor waiting their turn and the verdict of the surgeon. The wounds were all bad, for as I have said, it is the serious cases which come to these well equipped, compact little hospitals. The operative work was skillful and rapidly done and so far as I could judge by the statistics given me, the results were very creditable. I saw several operations done, major operations, and it struck me that this sort of unit had a very real place in the scheme of modern care of the wounded. The wounded were the same patient lot that I found them everywhere I saw them. They got on the table with no reluctance apparently and those who waited their turn on

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the litters made no complaint and did not seem shocked at the atmosphere in which they waited. I suppose that after living a life where each day brings death in one dreadful form or another before one's eyes, the air of an operating room even with the distinctive attendant smell of fresh blood and all that goes to make up that complex whole, must seem in a measure restful. It is certainly the antithesis of the front line. There it is dirt and destruction and the only chance is from bad to worse; here, it is cleanliness, reconstruction and the cunning work of busy fingers to put into place again all that has been torn asunder by the many engines of war.

In spite of the fact that this Ambulance was devoted to the care of more serious cases than the one at D——, the entire atmosphere was less depressing and I left it with less heaviness of heart than the one in the Parish house presided over by the tired surgeon who craved additional comforts for his wounded. There were several Ambulances grouped at this point; the Automobile Ambulance and others of the

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type of the one at D——, making quite a little center, or colony of the wounded. They were all marked by the flag of the Geneva Convention, both as flags proper, and by the Red Cross painted on the roofs of the buildings. They had been established there for some months and there was no possible doubt as to what they were,—and yet that did not prevent the ingenious Hun from very thoroughly bombing them with characteristic German persistence not a great while after my visit there. The results were about what might have been expected, and probably what the Boche did expect. There were a number of the wounded and of the nurses killed and wounded again—and that was the extent of the Military advantage. I am not sorry to say that there were included among the casualties a number of German prisoners who had been brought there to have their hurts tended and healed by the French. Under certain circumstances the bombing or bombardment of Sanitary units may be an unavoidable incident of war. That is to say if they

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are so located that they may be readily confused with buildings given over to the use of the combatant forces. Incidents of that kind while of course deplorable are not subject for condemnation, but must be taken as a part of a business which at the best shows little mercy. So many hospitals and sanitary units have been attacked by the Germans, both at that time and subsequently, that one is driven to the inevitable conclusion that it was a part of a well conceived plan of frightfulness and in no way attributable to the errors of judgment of those who executed the work. It is this sort of thing which has made Germany an Ishmael of the Nations. This ruthless singleness of purpose; this intent to destroy anything which lives and is not German. I went abroad, not neutral, but with a fairly open mind in regard to the possible exaggeration of some of the reports of German conduct. I found others over there who had been of the same opinion at first. I found none who had not changed to bitter condemnation and it was only a short time before I was

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forced to the same conclusion. Personally, I saw no atrocities; I was not in a position to see them. I had however many friends among the French, people of incontestable veracity and of fairness of mind, and what they told me was sufficient, aside from published accounts of such acts as the bombing of Hospitals, to leave me with the same shuddering opinion of the German character as is held now by almost every one who knows their works.

An important unit of the Zone of the Armies is the Evacuation Hospital. These are usually situated at Railhead and serve a double function; one as a clearing house, and the other as a Hospital for the care of cases which come to it and are not fitted to be sent further. They are an outgrowth of the war and occupy a prominent place in the care of the sick and wounded. Unless specially constructed, they are located in buildings adapted for the purpose and oftentimes much ingenuity is shown in making use of the resources which were originally intended for a very different purpose. Those

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which are at Railhead or attached to Railroad stations are naturally, and fairly so, subject to bombardment. An evacuation hospital is provided for each Army Corps. Its bed capacity and personnel is not fixed as its capacity is planned for on the basis of the probable or possible demands that will be made on it. It is an organization belonging to the Zone of the Advance, although until very recently it was accredited to the Zone of the Line of Communication. The central idea about which the French Medical Service has been built is the necessity for keeping every sick and wounded man who can be returned to duty in a reasonable time in the Zone of the Armies. This I have previously referred to. The most important single element in carrying out this idea is the Evacuation Hospital. In talking with French Medical officers the word "triage" (sorting) is constantly heard and one comes to realize how important a part this classification of wounded plays in the French scheme. While this sorting process is begun in the most ad-

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vanced Sanitary formations, it is at the Evacuation Hospital that its full importance is seen. That it is considered the vital factor in maintaining the strength of the combatant organizations there can be no doubt.

As I have said above, the personnel and equipment of these units is not specified. Formerly, they were, as the name implies, collecting points at Railhead for the evacuation of wounded and sick. Experience in war has caused radical changes in the organization of the unit. It now consists of two sections, one for evacuation and the other for hospitalization of patients. The two sections are under one officer who administers both. The personnel of the second section depends on the size of the hospital and the activity of the sector in which it is located. In periods of calm, twenty Medical Officers, two hundred enlisted men and about twenty women-nurses will suffice. When the front becomes active, forty or fifty Officers, three to four hundred enlisted men and a proportionate increase of women nurses will be required.

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Briefly, the function of the Evacuation Hospital is:

1. To avoid the exodus toward the interior of the large number of slightly wounded who can be returned to duty in a short time.

2. To insure the rapid and comfortable evacuation to the interior of wounded and sick who will require long treatment and who would uselessly encumber the Zone of the Armies.

3. To assure proper hospital care in the Zone of the Armies of wounded and sick who are non-transportable, or transportable for only a short distance.

The location of an Evacuation Hospital must be on a railroad. It must be as close to the front as possible and connected by good roads with the Field Hospitals. It must comprise suitable covered entrance for the unloading of patients from the ambulances; receiving rooms where classification of patients is made; shelter in separate places for seated wounded, recumbent wounded and the sick who are waiting evacuation; hospital wards, operating rooms for

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the non-transportable cases and a small isolation section for contagious diseases waiting transportation to a contagious disease hospital.

Formerly, existing buildings were adapted for the purpose as I stated previously, but as a matter of fact, at the present time these hospitals are now all constructed for the purpose they are to serve. It is absolutely essential that a railroad shall be in the *immediate* vicinity, or that a spur shall be run in, and that there be a loading quai on the level of the floor of the train. As to the capacity of the Hospital section of this unit, no definite rule can be laid down. It is inevitable that in periods of calm the hospital will not be working to capacity, and it is equally inevitable that in time of great activity its capacity and personnel will be overtaxed. On the average, they are designed to accommodate, in the Evacuation Section, 1,000 sitting cases and 400 recumbent waiting transfer by hospital train; the Hospital section, from 400 to 600 patients.

The work of these hospitals differs materially

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in time of calm and in time of great activity. In the first instance they care for all the serious cases arising on the front to which they belong. Many of them have well organized and equipped departments for the care of the special cases, such as plastic surgery of the face, eye, ear, nose and throat and similar special conditions. In periods of great activity their work is practically confined to the care of the non-transportable wounded, and the forwarding, through the evacuation section, of those who are to go farther back.

From the above it can readily be seen what an important rôle in the Sanitary service these hospitals play, and their adaptability to conditions of relative inaction and of great stress.

I visited a number of these interesting units located in different parts of France, from near the North Sea to the vicinity of the Swiss frontier. One that I saw in Northern France was located in a railroad station and installed in the buildings which were already there. They had made use of the freight shed since it was a

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large building and had the added advantage of having a quai, or platform, which was on a level with the car floors and thus made the loading of the trains a relatively easy matter. This big shed had been divided by temporary partitions into different rooms to meet the needs of the unit. There was no formal hospital in connection with it, the cases needing urgent care being transferred a short distance to one of the hospitals in the immediate vicinity. This was a wise precaution, for the station was very frequently bombed by airplanes and the risk of attending casualties among the helpless wounded counterbalanced any advantage which might have been gained by installing the hospital section. It served as a station for "triage" and the only wards were those in which the recumbent wounded waited the departure of the daily train which was to transfer them farther to the rear. There were holes in the roof and no glass in the windows and the Surgeon in charge showed me one bed which had been riddled, both mattress and pillows, by fragments of a bomb

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which had fallen on the unit a night or two previously. As one of the older type, this had no special construction and much ingenuity had been exercised in adapting the buildings of the station for their present use.

At R——, northeast of Verdun, I saw one of the later construction. This was at some little distance from the railroad station, but joined up to it by spur tracks which allowed the running in of trains for loading. The Surgeon in charge told me that they were not particularly busy at the time I visited it, but remarked in a nonchalant way that they did not consider that they had done a fair day's work unless they had forwarded through the evacuation section in the neighborhood of a thousand sick and wounded. The hospital section here was of about eight hundred bed capacity and the turn over from it depended on the condition of the cases in it and also on the pressure of work. Pressure of work is a factor in regard to these hospitals for the reason that when there is a drive imminent, or in progress, every case

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that can be safely moved, *is* moved in order that there may be bed space for the tide of wounded which will flow in as the result of active hostilities. The movement of the wounded through an institution of this sort involves a deal of detail. As they arrive they must be unloaded from train or ambulance, they must be sorted in accordance with their necessities, check records must be made and certain data entered on the personal records which each man carries with him. They must be fed, each one must be carefully examined to determine the condition of his dressings and in many cases these must be renewed before he is shipped further down the line. Arrangements have to be made for the makeup of the train that is to carry them on and word sent to the different receiving points in order that when they arrive they shall find adequate preparation for their reception. I was struck by the methodical way in which all this ran: there seemed to be no hitch, no lost motion, and yet no one seemed to be in a hurry or even to have the appearance

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of being very busy. I apologized to my friend the Chief Surgeon for taking his time to pilot me about. He protested mildly, that he was not very busy, that I in nowise interfered with the routine and concluded by saying that things were so regulated that he was quite sure that all would go on perfectly well if he went to bed and remained there until the next morning. There were a number of German prisoners there waiting to be sent on into the interior. The majority of those I saw at this hospital at this time were undersized boys, not very well nourished and apparently very glad to be in a safe place and through with war's alarms. They were by no means representative of Germany's man power however, for many months later I saw many others who were as husky, able bodied brutes as one would wish to encounter—or not to encounter save under similar circumstances, for the only Germans that ever looked good to me were either prisoners or dead.

As I was walking down a path between two of the wards the Surgeon stopped a minute to talk

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to an orderly and I went on alone, passing a group of French Sanitary Soldiers. They saluted as I passed, looking with curiosity at my uniform and after I had gotten by, I heard in unmistakable United States, "Well, I'll be damned! What in hell do you know about that! I haven't seen one in over two years and he certainly looks good to me." I wheeled and went back to the group and asked, in English, if the man who had been talking would mind coming and having a few words with me. Out stepped a short, gray haired man of about fifty, the least American looking one of the lot and with a good French salute and an embarrassed air said, "It was me, Major, but I meant no disrespect, and I was that astonished that maybe I spoke louder than I intended. You see I haven't seen an American Officer now since the war started and I just couldn't help it." I assured him that I had come back solely to have a few minutes' chat with him and not to take exception to his diction, and to prove it, wound up with, "And where in hell did you come from?" He explained

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that he had spent almost all his life in New York although he had been born in France; that he was a naturalized American but that he could not stand the strain when war was declared, so he had come over and enlisted with the French. His one grievance seemed to be that in view of his fifty years they would not put him in as a combatant and so he had been obliged to content himself with the duties of a Brancardier, or litter bearer.

This he had been doing since the beginning of the war, and knowing as I did, the kind of work that not infrequently falls to the lot of the litter bearers in their search for wounded, I was not sure that his lot had always been in the easy places he considered it had fallen. He was sturdy, and strong, a French type, and blended well with the group which surrounded him. He presented some of his brother non-commissioned officers, for he was a Sergeant, and we had a cheerful chat and when my French was too technical for the others he set them straight and when they wandered too far into the slang of the

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trenches he translated that into equivalent American slang for me and we laughed and joked while my friend the Surgeon stood a little apart with an amused smile on his face and waited until I should have concluded the amenities with this wandering countryman of mine who was the link between us both with his love of one country and his allegiance to the other. He was a good Sergeant, he said, faithful and hard working and deserving of much credit. I saw other Evacuation Hospitals in different sectors of the line; some of the improvised type and some constructed for the purpose as this one was. They all ran, however, on the same general plan and the functioning was smooth, regular and almost automatic. In the elaboration of this step in the care of the wounded the French have standardized, so to speak, the administrative method so that there seems to be little trouble with the functioning.

The units already referred to constitute those which are of the most importance in the Zone of the Armies, but it must not be inferred that

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the others which exist have no place in the Sanitary scheme. As they have been referred to in the Chapter on the General Sanitary system of the French, I make no further reference to them here.

I had one personal experience with Military Hospitals which left me with a very pleasant impression and a distinct sense of gratitude. In May 1917 it was necessary for me to make a visit to the British lines in connection with some official duty. We left Paris in the early morning, by automobile, and although I was not feeling well when I started I figured that a run in the open car would put me on my feet. Soon after starting I developed a persistent and distressing cough which clung to me for the 150 miles that we covered before noon at the usual rapid French rate. I sat through a long luncheon with a British General and his mess and found it the longest meal I had ever encountered. Immediately afterward I begged off from the afternoon program of work and asked if I might go to my billet and lie down until the next morn-

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ing as I was a bit seedy. A nice English Medical Officer took me there in his car, returned with another one and within the hour I was packed off willy-nilly and resting in the Officers' ward of the hospital in the town, with a very frank case of pneumonia which had been in process of development when I left Paris and which my long ride in the open motor had not benefited to any great extent.

I was an entire stranger to all the Officers there, but no one could have received more devoted, thoughtful care than was lavished on the American Cousin by his British kin. When the bad days were over and I was able to be up in a steamer chair, my room was full every afternoon of nice British officers. They brought me things to read and things to eat and things to smoke and things to drink and sat all over the shop and laughed and talked and gave me very clearly to understand that I was not a stranger in a strange land, but at home and with my own people. I cannot conceive of any finer, tactful care than that shown to me, a sick stranger

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in the little hospital at M——. There was one good looking youngster who came often to see me. He belonged to the Ancient Artillery and wore the absurd baggy knickerbocker riding breeches which are a mark of that organization. One afternoon, I got up from my chair and floated uncertainly over to my clothes in the closet and extracting one of my cards from a pocket, tendered it to him by way of formal introduction. He took it with a quizzical grin and without looking at it, said, "That's very nice of you and I am glad to have the card, but listen a minute and see if I really need it." Then he started and gave correctly, my full name, age, place of birth, year of entry into the American Army, date of departure from the United States, date of arrival in France and wound up with, "You are at present living with your wife and two children at the Hotel Regina in Paris and if you will give me a message to Mrs. Church, I will guarantee that it will be in her hands within twenty minutes." I asked him respectfully whether he was just a

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plain seventh son, or whether it was a family failing. He solved the puzzle by telling me that he was the Intelligence Officer and that it was his business to know all about any one who came into that part of the British lines, which absolved him from the suspicion of any uncanny powers. I did give him the message and he telephoned it to Paris on his special wire and it did get to its destination within the promised twenty minutes.

I neglected to say that the last thing I heard on the day of my admission to that hospital, just as I dropped off into a feverish, cough racked sleep, was the roar of the "Archies," the anti-aircraft guns, as they vigorously shelled a Hun machine which was over the town.

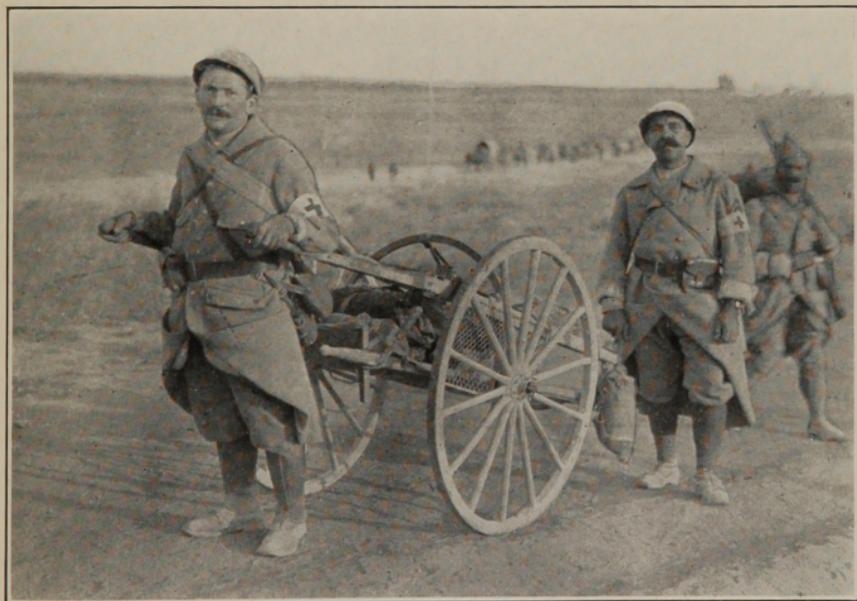
CHAPTER V

TRANSPORTATION

THE old saw runs, "First catch your hare." In order that the wounded in war may have the advantage of the necessary treatment, it is requisite that they be collected and transferred to the different stations established for this purpose. All transportation comes under three general heads: first, that of hand carriage, second, by vehicle, either horse or motor driven, third, carriage by train or boat. All are important and occupy a definite place in the sanitary scheme and each one presents its own special problem. The collection by hand is that which is first in the order and involves the moving of the wounded from the place where they have fallen to the next station. It is hard and trying work, made more so by the fact that much of it has to be carried out through the



TRANSPORT OF WOUNDED BY LITTER THROUGH A TRENCH.



WHEEL LITTER TRANSPORT.

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trenches where walking is difficult even when not encumbered by a burden. Due to the range of modern Artillery fire the approach trenches may mean a matter of one or two miles through which litters must be carried, although this is obviated at times by evacuation over the normal ground level at night when darkness gives relative protection to the working parties.

This class of work is done in the Regiment, by the Regimental Litter Bearers, who form an integral part of each Regiment, and they are supplemented by the personnel of the band if the Regiment has one. These bearers are supposed to clean up for their own Regiment and see that the wounded are carried back to the first aid station. If further hand transportation is necessary from this point it is furnished by the Division Litter Bearers, who are held in reserve by the Division Surgeon and sent in where their services are most required. In many cases the wounded are evacuated direct from the first aid posts by ambulances which are now, in the vast majority of cases, motor driven. In addi-

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tion to the Division group of bearers, there is another supplementary group which belongs to the Army Corps and is under the orders of the Corps Surgeon and used in the same manner as that of the Division.

The work of these carriers of the wounded is hazardous as well as being hard physical work. The French say that "all shells are blind" and many men of the Sanitary Corps have lost their lives while trying to save those of their fallen comrades. It has always seemed to me that much credit should be given to these patient searchers for the wounded. They have none of the spirit of the chase, the excitement of conflict, the stimulation of battle. It is their lot to plod along in the shell shattered area and clean up the muss that their combatant brothers have made. The wastage has been high among them although I have never seen any published statistics in regard to it. Many expedients have been tried to expedite this hand labor. In the trenches themselves, much thought has been given to devising a litter

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which will adapt itself to the narrow and tortuous length of the steep walled ditches which make up these systems. Some of them have been fairly successful, but in the main, the French have depended on the regulation Franck litter or on rude improvisations constructed of poles and canvas. One form, however, is in extended use although it has no place in the trench proper. This is the wheel litter, and by its aid one or two men can transport a loaded litter with the minimum exertion since the load is transferred from them to the supporting wheels. They will go almost anywhere that a wheelbarrow can be pushed and are extremely practical. I think that the most satisfactory one that I saw in operation was conducted by two surly looking Boche prisoners presided over by a French guard. At the beginning of the war the French were almost entirely dependent for wheel transportation on horse drawn vehicles. There were plans for motor ambulance sections, but only a few of them were in actual operation and the most of the transfer was done

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either by the little two wheeled ambulances or their big brothers with four. It was a very short time before the superiority of the gas engine over man's patient friend and ally, the horse, became evident, and practically everything was turned over to the gas driven car.

An orderly system was rapidly evolved in the operation of these and at the present time the make up of the Sections is not radically different from what it was in the first days of their use. There were mechanical questions to be settled of course, in regard to construction, type of engine, weight of car and capacity of the car for wounded. Some of these problems took much trial for their adjustment and others settled themselves very promptly by the aid of practical experience,

As an example of the latter, there is the method of putting the litters in the ambulance. Each car has a capacity of a certain number of litters, each carrying its wounded man; some three, some four and others five. This necessitates that some of the litters

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shall be suspended above the floor of the car. Some one seeking to devise a method by which the wounded should travel with as little shock as possible, devised the scheme of suspending these upper litters by straps which were attached to the uprights by coiled springs. It was thought that in this way the jar of the road would be taken up and much added to the comfort of the patient. It was very quickly discovered by those who drove the motors that the reverse was the truth. The suspended patients, in addition to having the inequalities of the road accentuated by this system of suspension, were subjected to a back and forth swing,—thrust, which was practicably unbearable. You can readily understand it if you will imagine yourself with a shattered thigh on a litter which is swaying back and forth from head to foot with each move of the motor and grinding together the two ends of the splintered bone. The man who was placed on the floor of the car was the fortunate soul and the drivers brought comparative peace and comfort to the inhabitants

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of the upper tier by boring holes in the wooden sides of the car and lashing the oscillating stretchers fast and immovable. It was only a short time before the spring suspension, or any suspension, was looked on as obsolete and the cars built with channeled runways into which the shoes of the stretcher fitted. This method has persisted and has not only made things easier for the sorely tried passengers, but has facilitated the question of loading.

There were long and sometimes bitter arguments between the advocates of the light and the heavy type of car and each side claimed for its preferred type many advantages which probably did not exist and overlooked others which did. It was finally demonstrated that there was a place for both kinds, and thereafter "the tumult and the shouting died." To speak of a product so well known as the Ford motor can scarcely be considered as advertising. Many of this make of automobile were taken to France and there was much discussion as to the merits of them for the work to which they were put. As with the

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general argument for the heavy and light cars they had their partisans and those who opposed them. The early ones in use did have several faults which were overcome by later modifications. The long overhang of the body put an undue strain on the supporting sills which were prone to break and this added weight was also too great a tax on the 8 leaf rear spring. When the sills were made stronger and another leaf added to the spring this objection was overcome. Their lightness was an advantage inasmuch as when one ran off the road it was a simple matter to put it back by the aid of four or five men, and there are always four or five men on any of the roads in the Zone of the Armies in the France of wartime. Due also to their light weight they will go, and can be driven where heavier cars would "bog down." I found the French in the Vosges mountains very much in their favor for use in that precipitous country. On the other hand I heard that they did not wear as well as some of the more expensive cars and were an undue expense

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for upkeep. I hold no brief, either for or against them, and I have mentioned these facts merely because they are really a national institution and I have been many times asked as to their utility in this class of war.

The French have adopted for their heavier type of car, a body which holds five recumbent cases, four of them on the channeled runners already referred to and the fifth on the floor of the car underneath them. This was an evolution of the four case body and it can be readily seen when we multiply one car by the twenty, which make up a section, and those twenty by the number of trips made that the addition of even one case to the carrying capacity of a car is a very appreciable advantage in the question of evacuation. The personnel of these Sections is about forty men and presided over by two commissioned officers. They are self-contained units, and carry their own cook and tentage to shelter them at the sector at which they are at work. They are, as is all Motor transport in the French Army, under the direction of the

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Automobile Service. This does not mean that they have their duties prescribed for them by this service, but that so far as mechanical direction goes they are responsible to it. Their spare parts come from it and the replacement cars to take the place of those shot up or worn out. So far as their actual running duty goes, they are under the orders of the Chief Surgeon of the Sector in which they work. He lays out their schedule and the Officers in command of the Sections are held responsible that the section does its work in accordance with the directions it receives. They are a roving organization, here to-day and gone to-morrow, and they foregather where there is the shock of battle and the blood flows fastest. Naturally there is but little work for them in a peaceful sector and they are drafted to those in which there is real activity. They have proved devoted in their duties and have gained much commendation from their brothers in the line who are dependent on them for transport when German ammunition has laid them low.

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Prior to our entry in the war a very appreciable proportion of this collecting work was done by American volunteers who worked under two different organizations, the American Ambulance Service (later the American Field Service) and another series of sections organized under the direction of the Red Cross. This service was built up from small beginnings and in the course of time came to be an important adjunct to the French sections engaged in the work. At first there was some difficulty due to the fact that it was, as is universally the case, difficult to adjust questions of discipline in a volunteer organization. When this condition was recognized it was met by measures which did away with the objectionable feature and thereafter the functioning of the service was smooth and satisfactory. The French system was adopted and the make up of the volunteer sections was identical with those of the regular French army. A French officer was put in command of each section and the American volunteers worked under his command. The per-

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sonnel was under a pledge to serve with the section for a minimum of six months and many of them renewed the obligation.

The result of this voluntary aid was an advantage to the French in the material help afforded and to our own country in the experience and training it gave to the men who after our entry in the war were qualified to do the work themselves for their own people. The French were entirely appreciative of the efforts of these two services and at a time when there was much speculation as to what was to be the attitude of America in the war the presence of these men in this active capacity did much to retain the confidence of our Allies as to our ultimate intentions. I heard many comments by my French friends in respect to the good work accomplished by these American Sections and they were always accompanied by warm appreciation and entire affection. At the beginning of our part in the war these services were absorbed by our army and many of the personnel remained to carry out as enlisted men and officers under our

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own flag the duties they had learned as volunteers with a foreign force. The duties which fall to the Ambulance driver are by no means a sinecure. They call for resourcefulness, for self reliance, stamina and a disregard for personal safety. To drive a smoothly running motor on a good road with clear daylight or adequate illumination by lamps is a very different proposition from nursing a heavy car at a low rate of speed over a road pitted with shell holes and subjected to intense bombardment.

No one who has not had the doubtful pleasure of riding in an ambulance under such conditions can appreciate what it means. There is no darkness so black as that of these cloud draped French skies where light comes only from star rockets. One cannot see; he must go I think by intuition. There are a thousand things to confuse and puzzle: the general lay of the road must be in the driver's mind, with all shell holes and obstructions registered in his mental processes and even so he has no assur-

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ance that since he has last traversed the way of his coming some fresh shell burst has not opened up a new pitfall to catch him and his wounded cargo. He must dodge the traffic of the "ravitaillement" convoys, the camions which each night bring up to the front lines over these blasted thoroughfares the supplies for the front that can come up only under the shielding protection of the darkness. He must expect damage to his car and to himself by shell burst and carry on as long as he can even if wounded, or put his car again in condition to travel if within range of human possibility. And he must make his repairs in the dark, by the sense of touch and with the certain knowledge that other shell may come before his task is finished and blow him and his machine and his wounded man in a gory tangle of torn flesh and broken wood and twisted iron far past any chance of recognition.

He must expect to drive through gas when his sight is not only obscured by the cloud but by the mask he wears for protection.

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He must forget that there are hours when the human system cries out for rest and repose, and so long as there are wounded waiting for transport from the front to their place in the rear of the line he must keep his heavy eyes open and with clear brain and a high heart shut his teeth tight on the sense of hunger and fatigue and cold and danger and drive, drive, drive; until the front is clear so far as his sector is concerned, and then, perhaps if the fates are not kind to him, hustle off to an adjoining sector to lend willing if tired hands to those who need them there. Twenty-four hours, thirty-six hours at a stretch is no novelty in his day's work and he does it with the cheerful sang froid of the clean bred American who knows how to spend and spare not when he considers that it is "up to him." This is the class of work that was so well done by these two volunteer organizations and it is little wonder to me that the French were fond of these boy drivers of theirs who held their chins high and with a cheerful grin and an impudent cigarette in the corner of



AMBULANCE DRAWN BY DOGS.



SANITARY DOG—"RED CROSS DOG"—DRESSING HIS WOUNDS.

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their mouths drove through Hell with entire apparent unconcern. They did not all drive through though, for sometimes the red flare of the burst carried the steel fragments home and stilled the brave hearts beneath the rough clothes.

Cross guarded mounds, from the Vosges up through Verdun and on beyond the plains of Picardy, mark where these young seekers of the Great Adventure have found that which they had so often regarded unafraid with their frank boyish eyes. During the latter part of my service in France I was sorry to see in one of the papers of Paris which is printed in English a rather bitter and I thought unwarranted criticism of the many young men who made up the personnel of these two services. I had the opportunity to know many of them and I am glad to bear testimony that those I saw were straight and clean and unafraid. They were a credit to our Great Republic and the memory they left after them is one that will remain green in the hearts of our allies and is one which we should

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cherish, the record of fine service done un-asked, of labor and strength and life given because they believed the cause was their cause and in this way only could they at that time bear testimony.

At the time we took our place in the ranks of those opposed to the Hun menace this service was taken over and administered by our own army and it was my good fortune to make, under General Pershing's order, an inspection of the American Field Service that I might report to him their availability for incorporation into our own forces. In company with the Director of the service I not only went over the complete installation in Paris, where the central offices, the receiving barracks and the various repair and construction shops were located, but in company with him I spent some days at various points of the front that I might be in a position to report not only on the general organization and the material resources, but as to the **actual** working conditions of the sections under field conditions. This tour carried us from the

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always interesting Verdun sector on the South up the line to that man made hell the Chemin-des-Dames. We left Paris in the early day of a summer morning in a large and perfectly capable Peerless car driven by a taciturn young man who was as capable as the car and exacted from it relentlessly as much kinetic energy as was potentially stored under the long black engine hood.

We went out over the smooth straight line of the Route National to Montmirail where stands one of the many monuments of France, this one now scarred but not broken by the German shells which struck it during the hard days of 1914. We ate a cold lunch in the car, and literally I do not remember that I ever had a meal go so far, as we were reeling off steady mile after mile at fifty, fifty-two and fifty-eight to the hour. Travel by motor is not regarded as a pleasure in France to-day; it is an errand, a method of annihilating the space that exists between "here" and "there", and your chauffeur gives his entire and silent attention to seeing

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that there are no wasted seconds in transit. I have a private suspicion that he sometimes makes it a sporting proposition with himself. There was a big French staff car in front of us which I soon realized must be passed, though why I do not to this day know. With my mouth full of cold chicken and hard boiled egg I watched the speedometer, which read in miles, creep from fifty to fifty-five, jump to sixty and then while the needle danced drunkenly above sixty-eight there was the throb and roar of passing engines and we sailed triumphantly away ahead.

The speed laws of France to-day are very explicit and entirely exact: they are based altogether on the power of your engine and your own confidence in your maker,—of your car. We visited a school of mechanics and construction where the personnel of the service was sent for a course in both the theory and practice of driving and repairing cars and in the technique of handling and managing convoys. There were lectures by officers of the

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French Automobile Service with blackboard diagrams and formulas which looked decidedly technical, and there was a well equipped work shop where these student volunteers were taught to take to pieces and assemble various makes of engines and to make such repairs as would fall to the lot of the ordinary, or better said, extraordinary, chauffeur under the many adverse conditions which were thereafter to be his normal daily surroundings. It seemed thorough and practical and the Director told me that it was a manifest advantage and that in this way they were able to turn out men who in addition to being good drivers had also sufficient technical knowledge to render them of value for positions which necessitated more than an understanding of the requirements of the throttle and the brake. The lectures were all in French, and I am sure that the absorption of this technical lore in a strange language was not altogether a light and easy task. It was good practice however since their duties would lie with those who spoke no other language and with the

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easy facility of youth they seemed to be entirely undisturbed by the fact that they must think in a foreign tongue.

From the school we went on through Chalons-sur-Marne and St. Menhould and Clermont-en-Argonne and up to a Section which was operating behind the Avocourt sector in the Bois de Hesse. This is all N.E. of Verdun and there has been much hard fighting in the country and the life of a Section on duty in this vicinity is sure to be a busy one at some time of its stay. The day we were there was one of comparative quiet. Comparative quiet on the western front should not bring to the mind of any one an idyllic, lazy, drowsy summer day. The word "comparative" was I think invented for battle use and it is easy for one to say in regard to existent conditions, it is "comparatively quiet to-day." I have seen times when I thought that indeed comparisons were odious. As there is always motion in the sea even in time of absolute calm, so on this tossed and troubled field of war, comparative quiet does not mean a cessa-

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tion of gunfire, an absence of war's furors. It is, I think, in line with the leading western citizen's eulogy over the body of the dead bad man of whom the best he could say was, "Brethren, he might have been a damn sight worse."

We inspected the quarters of the drivers which were the usual French billet, barns and sheds commandeered for the purpose but cleaned and in order with commendable American neatness. We looked over the row of waiting Ambulances and lifted hood after hood to see if we could find a dirty engine, which we did not, and we had our attention called by the fresh faced drivers to the jagged holes in the wood work or the white scars on the iron where Boche shells had left their biting mark during such and such a run. They were proud of those scars of service and I do not blame them. We went with the American Section Chief, for there is an American Assistant Chief as well as the French officer who is in supreme charge, up to the first aid post which drained the front trenches of this sector. There we found an Ambulance pro-

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tected from shell fire behind some débris and a segment of still standing wall and down in a dugout two blasé youths who were playing listless casino and complaining that it was unutterably stupid that day with no excitement and nothing to do. From here we went on ahead through the green of the Forest to one of the French observation posts presided over by a smart little French Corporal and one or two men. From this there was a good view of the German lines not far distant and with the aid of a pair of good glasses it was possible to make out very plainly the trend of the enemy trenches and the tangled mass of his barbed wire which loomed on the other side of that bare waste of "No Man's Land."

The next day we spent in looking over various sections in the vicinity of Verdun and in the evening were off again to the Northeast of Verdun where we dined at the mess of one of the sections which was on duty in the Sector comprising the Mort Homme and Hill 304, points which at that time were fiercely disputed

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by both the French and Germans. This was just prior to the drive in July 1917 in which the French retook both these points and extended their lines to the point they had occupied at the time of the initial thrust of the troops of the Crown Prince in his hapless quest for the pass at Verdun. I had been in hopes of making this visit at the time of the Infantry assault, but got there too early and had to content myself with the Artillery preparation. As a spectacle this is all that could be desired and as for overwhelming insistent noise it goes far beyond anything that the imagination can conceive. The headquarters of this section were at that time at Villes-sur-Cousines (since this ground has passed well into French control there seems to be no reason for avoiding names) and here were the cars of the unit, save those which were on duty at the different advance posts, and here were the repair shop and the quarters and mess of the men who made up the section.

After a cheerful supply with the personnel

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I set out with the French Lieutenant in command to inspect the forward work of the Section. The evacuation of the wounded, save in time of intense activity, was carried on in the dusk and in the night, since much of the road traversed in doing this lay within plain view of the German lines about the Mort Homme and Hill 304 and they were not backward about shelling any moving transport on the roads. We went in a Ford car up through Dombasle, from which the section had been recently shelled out, over roads which grew progressively worse, until we came to the town of Montzeville. The roar of the guns grew louder as we advanced and before we reached Montzeville we came into the area in which French batteries were posted, and in action. So well and carefully is artillery now concealed that it was a difficult matter to make out the location of the batteries save from the flash of the guns themselves. It is distinctly disconcerting to have a battery of which you have no previous knowledge, fire a salvo from your immediate vicinity; to hear

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the shells tear their way over your head and to feel the shock of the concussion. It shakes you mentally and physically and the first of these literally raised me off my seat to the amusement of the French Lieutenant. The Germans were searching for these batteries with good sized shells and the black clouds of their bursts dotted the hills all about and the sharp roar of their explosions added to the noise of the French artillery. One dropped on a battery near the road as we came along and killed one of the gun crew. They brought him in to the aid station, his face covered with a cloth through which the red stains showed.

His body was placed in an angle of the wall on the stretcher and excited no comment and apparently no curiosity. One chatted or laughed or smoked a foot away and it all seemed a matter of course; that which had happened to him to-day might happen to any one to-morrow and was only a part of the day's work. Of course that is the only rational way to view it, for war is a gamble for the individual at

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best, but it seemed very close and personal to see this healthy sweating peasant turned in a minute from a living entity to a mangled shape whose only further end was burial in one of the cross crowned little cemeteries which mark so much of France to-day.

Montzeville itself was a husk of a town. Of course no one lived there save the troops who were on duty in the immediate vicinity. The houses were roofless shells, pitted and scarred by the German gunfire and the once tidy street was pock marked with shell holes and littered with *débris*. We left the Ford car here and, after visiting the little dugout which provided shelter for the small number of Sanitary personnel on duty and the wounded from the nearby batteries, I changed to an Ambulance which was to go forward to Esnes, to wait there during the night on emergency duty; to bring back any cases which might not be able to wait long for treatment. This ambulance bore the mark of shell explosion and the boy driver who was in charge of it told me

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that it was quite customary to be shelled on the way to Esnes, and especially at one point where the road made a sharp turn and ran for a way parallel to and in plain sight of both the Mort Homme and Hill 304. He told me that they usually ran with two men on the front seat so that if the driver were hit the other could take the wheel if he himself escaped. As I was not myself a competent chauffeur I wondered what would be the fate of that particular car if anything happened to him at the turn that night.

We picked our way slowly in the fading light over a road that was bad because it was pitted with shell holes, littered with various obstructions and covered with a coating of greasy mud. All around us, before, behind and on either side the French batteries of large and small caliber were in action and the air was full of the scream of the departing shell and also punctuated by the drone of the German projectiles which were searching for them in counter battery work. It was slow going and,

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if progress was no more rapid under these conditions when it was possible to see the way, I wondered what it was when you had to feel out your route in inky blackness, threading a precarious way through the maze of transport which each evening crowds the road. Everything along here bore testimony to the fact that it was the scene of conflict. There was the active evidence of the French batteries in action and the burst of the German shells in reply.

Everywhere were the craters of former explosions and new ones forming at various points. What few trees remained were riven and splintered, hanging their withered heads in token of the blast which had swept over all this once fair landscape. There is an incongruity about a battleground in a cultivated country. It seems all wrong somehow; not to belong; as though some black hideous excrescence had appeared on a flowering plant. There yet remain enough of the landmarks of happy peace to show what had existed before the scorching

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breath of war and passion had swept over everything turning the green to brown and breaking and twisting into fantastic shapes all the homely marks of normal existence. We crept on in the glow of the sunset up the battered road going straight toward the Mort Homme which showed as a dominant height wreathed and dotted with the white bursts of the French shells which sprang up one after another over its face as the shells landed and exploded. We were not shelled at the turn this night, but as we turned and began our run parallel to the Hill 304 on the road which ran into Esnes, (pronounced, "N") German shrapnel began to break before, behind and on either side of the road. I do not think they were looking particularly for the ambulance, it was just a part of a methodical search for the batteries which were in action against their positions. None of the shells burst very close to us, the nearest about two hundred and fifty feet away I suppose, but it was enough to give one an idea of sudden death or mangled after existence.

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We jolted into Esnes over a road which grew progressively worse and was littered with brick and fallen masonry and tiles which had been dislodged from the houses of the little village. Esnes was Montzeville over again, only accentuated. No one was here either save the soldier garrison and it seemed a ghost of a place in the fading light of the summer twilight. The house fronts without their roofs shone gray and ghastly in the twilight and the shell holes in them were black and ragged. Shells were bursting in many parts of the town and their explosion was followed by the downrush of masonry and the tinkle of falling tiles. We went on up a street past the body of a dead horse whose stiff legs pointed grotesquely up to heaven, the one remaining evidence, save some dark stains on the ground, of where eight men of the transport train had been caught in a shell explosion the night before and their lives blown quickly out. Even as we came up a fatigue party came out with picks and shovels, and under the constant urging of a non-com-

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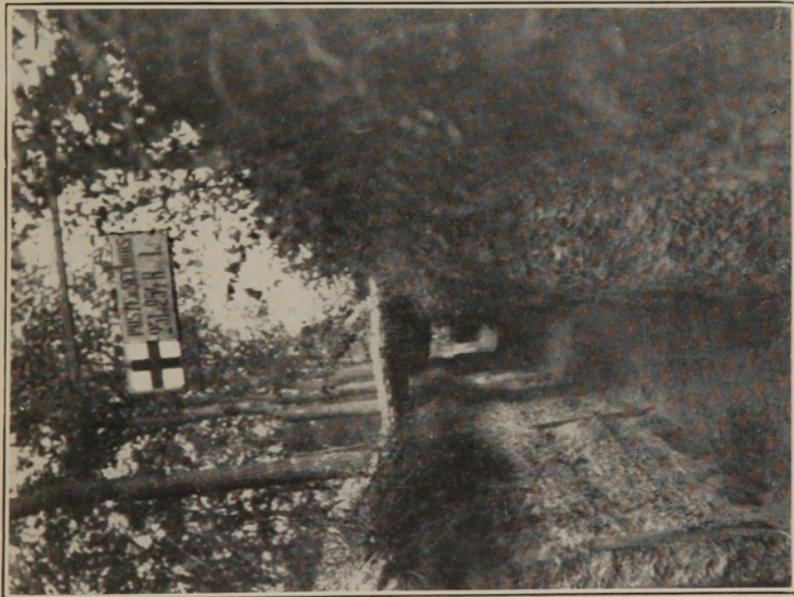
missioned officer hurriedly put this last distorted evidence under ground. Everything is done hurriedly that can be so accomplished, in this region where death drops unexpected from the skies and no man is safe save he be protected by solid earth and rock above his head.

The first aid post was in the cellar of an old château. The usual type, the brick and stone arches reinforced by stout timber uprights to make assurance as doubly sure as might be. The entrance was down a flight of stone stairs and the interior dark and low and crowded with bunks, wounded and the personnel who cared for them. Coming in from the light one had to go slowly in this dusky cave to avoid stepping on some silent figure which waited with characteristic stoic patience his turn to be transferred to some place where he should receive care for his wound, clean bed and quiet surroundings. It was all rather like one of Dante's word pictures. The gloomy darkness punctuated by the flare of the torch like lamps and the candles, the smell of blood and drugs, the thick shadows

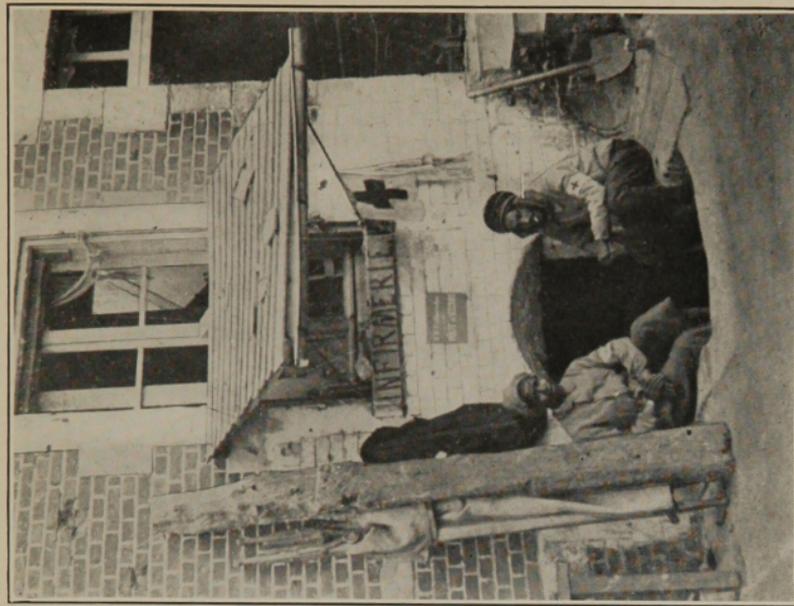
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which lurked in the corners and threw into relief the staring white of the fresh bandages and the pale gray of the upturned faces. It seemed very fitting somehow that the setting of the picture should be underground, for it was certainly associated with death and all that goes with it.

I made the rounds of the little establishment with the Surgeon on duty there and he explained his cases to me and the means he had of caring for those who came to him for this the first step on their road to cure. There is not much, of course, which can be done in a unit of this kind: only the simpler kinds of work. One stops hemorrhage of course, if it exists, injections of Anti-tetanic serum are administered, splints are adjusted and the men given broth and stimulants if required. The first aid post is just a check point to insure that the wounded who go from it shall leave in the best shape possible to make the trip to the unit further back. It makes no pretence at anything in the way of formal work. All that



A TRENCH, SHOWING SIGN INDICATING
LOCATION OF A FIRST AID STATION.



FIRST AID POST IN CELLAR; BELONGING TO
ARAB, "SPAHI" TROOPS.

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is done, however, is entered on the tag which is twisted on a wire on a button of the wounded man's coat and he arrives at each station with a readily accessible record of what his injury is, and of the measures which have already been taken for his relief. The urgent cases, those which should receive prompt surgical care, are so marked by a special tag. The whole system is along the line of that key word, "triage"—sorting, which as I have stated is very nearly the base on which this system of care of the wounded is built.

There were not many seriously wounded in this dark little cellar this evening and I was spared the always harrowing sight of the mangled men who uncomplainingly bear injuries which seem beyond the control of human fortitude. At certain posts, such as this, where there is apt to be need for transport at almost any time, a motor ambulance is kept always on duty throughout the twenty-four hours. It was to replace the one then there that we had come up, and the boy who was my

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driver from Montzeville was due to wait through the long fire swept night until he in turn was relieved, or obliged to feel his way out in the Stygian blackness with his wounded. As I have said, all these highways of the front are each night subjected to searching shell fire in order to harass as much as possible the service which brings up to the front lines the stores of food and ammunition and other necessities which may not be safely transported by the light of day. And so, soon after I had finished my inspection, the Surgeon suggested with true French tact, that it would be safer for his wounded if I could find it convenient to make my way back with as little delay as possible since the hour for the evening "strafe" was approaching. I could see no good reason why I should subject those already wounded men to further risk, and my mind reverted to the dark stains on the ground and the grotesque dead horse at the bend of the street—the mute testimony of what the German hate had accomplished the night before. I am not at all ashamed to say

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that it was at least one word for the wounded and one for myself, for I have never made any pretense that I enjoyed being under shell fire. I do not know whether one does get so accustomed to it that there is no eerie creep at the back of your neck when you hear the hoarse noise of an oncoming shell which gives only the advertisement that it is coming, but no information as to its exact destination. I do know, from personal experience, that for me, at least, there was always a tense moment until the burst had demonstrated that that one, anyhow, did not bear my number. And so I was quite ready, having seen all that I had come for, to take my place in the front seat of the loaded ambulance for the return trip.

We crept slowly out through the ruined little village where the shells were beginning to fall with increasing frequency, over the battered road and slowly on account of some engine trouble up the rise; along the parallel stretch of road where the black shrapnel still burst, around the corner and with our backs to

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the Mort Homme and the lines back through the bleak blasted terrain again to Montzeville, where we found the same quiet confident Poilus and where the dead cannonnier still lay, his feet in their worn, hob-nailed shoes more grotesquely stiff than ever and the stains on the cloth over his face turning from bright red to a dull brown. We lingered a while in front of the little dugout, chatting with the Sanitary personnel, and then back again through a throng of horse-drawn wagons, of camions, of diminutive "burros" which with their loads on their backs went up into the trenches themselves; through all this which made up the nightly "train de ravitaillement" to our night's lodging in billets in a sleepy French village where the sound of the ever pounding guns hammered in my ears like a pulse of the night. The next night, a German shell dropped on the place where I had been standing in front of the little dugout, and among those who paid the toll was one of the Ambulance drivers of the section, a lad whom I

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had laughed and talked with the night before. And a few days later, back in a town further to the rear, on the same road a waiting convoy of motor ambulances came under the fire of high explosive from German 150 mm. shell and two more of the Section paid the price for their service. The next evening, I visited another post of the same character, further to the North where our fast flying car had transported us on our inspecting tour.

To reach this post we went through a town, deserted of course, which the Germans were vigorously bombarding: went through it on the doubtful advice of a French soldier who seemed to think that it was not advisable to do so in face of the shelling. I am sure he was right, for when we had careened through the splintered streets to the roar of shells and the crash of smashed houses and were drawing peaceful breaths on the other side we were informed by another blue clad Poilu that our first informant was by way of being an idiot and that the town we sought did

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not lie in that direction at all, but that we should have taken the first turn to the right on the other side of S——, the cheerful village we had just safely passed. And so back again through S—— and its harried thoroughfares and tottering houses. The second passing seemed to me entirely gratuitous and I could have cheerfully argued with our first *mis-*informant but we took no harm and found the right hand turn and the way we were seeking.

The view as we approached the little town, or village, where lay our Aid Post was interesting. It was a relatively flat country, rolling a little, and the German lines lay on a long ridge in plain view and marked by the constant burst of the French shells. It was fascinating to watch these; they danced up in fierce white jets or brown columns, which sprung up eagerly at first and then lazily dissipated as they lost their first fierce energy and drifted away on the wings of the summer wind. They appeared with no apparent regularity as to lateral direction. Sometimes there were four or more

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which all flowered at one point, the evidence that there was directed fire "by battery," and at other places single clouds showed that the bombardment was in slow order. The color of the bursts varied from the woolly clouds of the shrapnel, which hung in the sky, to the sudden upspringing from the earth of an inverted cone of gray and black and dun yellow, where the high explosive sent up its cloud with the riven earth and rock from the point of its impact. In between all was drowsy summer peace. The fields were high with grass, the summer twilight hush was in the air and the birds ranged over the fields in evening song before they sought their roosts. Scenes of this sort are incongruous; it is the contrast between the struggle of man in his passion and the struggle of nature to hold to her own inflexible order the things that are hers. And finally, nature will conquer, for when the "shouting and the tumult dies, the Captains and the Kings depart" all this will come back to the purpose for which it was designed and the scars of man will heal

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on the landscape and remain as faint evidence of spent passion.

At the outskirts of the village we changed from motor transport to walking, and I noticed that our chauffeur carefully turned the car around, backed in under the precarious shelter of a drunken looking wall and left the engine running. It is sometimes an advantage to have a flying start and not be dependent on the vagaries of a motor which, with the perverseness of inanimate objects, shows a disinclination to function. We found here the same dead town. They do look so pitifully dead, these abandoned French villages of the front lines. Everything in them cries out of the homely life which has been squeezed out of them. Here, the sign says, is a restaurant—the only tangible evidence of it the blackened wall with the faded letters of the sign. There, the opened front of some one's house showing splintered furnishings and tattered curtains which wait the return of the fam-

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ily which may be in exile or gone beyond the possibility of any coming back.

The streets are there but they are not streets, just echoing cañons between gaunt skeletons of dwellings and littered with débris, battered belongings and shattered masonry and brick. It all seems dreary and dead and unaccountably still. One waits with expectant ear for the hum of human life, the sound of talk and laughter, the voices of the children at their evening games and the familiar human rustle of the homely peasant world before it puts itself to bed. Of course you know that it is not, and cannot be there, but it seems as though it ought to be and its absence makes the stillness more marked in this quiet time of the evening hush. And then you realize that there is no evening hush; that you are conjuring up in the eye of your mind what ought to be in your own place, in the quiet hills of New England, the fastnesses of the Appalachians or on the wind swept prairies—wherever it is that memory places these scenes. The stillness is a mental conception

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and the physical senses are keenly aware of the life which *is* here,—the life which exists to *take* life. With the angry crash of shells, the noise of their oncoming, of their passing, the noise of breaking houses and falling ruins, the illusion of quiet passes and the interest quickly centers again in the ego and what is to happen to it.

We made our entry here to the accompaniment of a very lively evening bombardment. Mostly six-inch shells which with their high explosive content shake not only your mental self in their burst but by their physical energy, rack and rock your very body itself in the violence of their explosion. They were dropping in all quarters of the village and it seemed to me during our brief quest of the aid post and the French officer in command of the village that their frequency increased. One broke in the street about a square ahead of us and shook down two uncertain houses in a golden haze of broken brick and dust and we could hear them falling in the streets to our right and left as we approached the partially destroyed building

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which sheltered the Headquarters of the Commandant and served also as the station for the first aid post and the waiting ambulance. We found a French soldier on guard in the courtyard of this building and in response to our inquiries were told that the French Major in command of the Sector was dining in the cellar with the Ambulance driver, the American lad who was on duty at this time in this harried village. We expressed a desire to see the American and begged that the Major should not interrupt his evening meal on our account. In answer to our message, taken by the steel helmeted orderly, both the Ambulance boy and the Major emerged from the dark doorway of the cellar, the latter wiping from his long gray mustaches what I am sure must have been perfectly good, "Pot au feu" or "Petite Marmite." One of the gravest crimes you can commit is to interrupt a French soldier at his meal and I was instantly contrite and apologetic. I was assured that it made not the slightest difference; that he had finished; that he was glad to

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be interrupted; that it would be a pleasure if I would come and conclude the very poor repast with him. I regretted that I had already supped and assured him that I had come only to see the conditions under which the Ambulance Service worked at his post. He assured me of the satisfactory character of the service afforded, indicated the waiting motor car in the corner of the court, and then asked me, with an earnest and thoughtful air, if I had happened to notice as I came into the village that "there was of a bombardment there this evening?"

Just then a shell exploded across the street and cast bits of flotsam and jetsam over the high wall into the court, and rather than appear too stupid, I acknowledged that I had had a very grave suspicion that such was the case during my short walk through his altogether charming village. He became more animated and told me that he was each evening the recipient of attentions of this kind but that this evening seemed to be the occasion of an extra

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effort for some reason, or as he expressed it "Ce soir le Boche est très, très mechant." What the Boche was angry about he did not state. Continuing, he said that of course he felt honored by a visit from me, but that this was no place for me at present; that he was particularly glad to see me as I was the first American Officer who had so far visited him but did I have a motor car near; that I was not only the first American Officer who had visited him, but the first one he had seen, but that in view of existent conditions, much as it distressed his sense of politeness he was compelled to suggest that I leave him before my blood might be on his head. That the shelling was rapidly growing more intense and that frankly, it was no place for one who did not have to be there. I recognized, from the evidence of my own senses, that there was a measure of truth in what he said and wishing him good luck and hoping some day for a more satisfactory meeting we left him in his desolate, shell infested

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little village and went back through the streets which shook with the quickened roar of high explosive to where the good little motor was still turning, and in it away through the soft summer night with our backs to death and carnage.

Strange as the coincidence is, at this same village, in the same courtyard, the waiting Ambulance driver was killed on the following evening by one of the shells of the "evening hate." In addition to duty of the kind described, there is much more which has to be accomplished by these Sections. It would not be practicable to split up the motors of the sections, assigning them to individual stations; this is done only in places where there is unusual activity; in the others, except in time of attack, the evacuation of the wounded is accomplished according to schedule by cars assigned to the duty and which make daily fixed runs over an established route. These "tournée" cars are due at certain of the collecting points at a certain time each day and such cases as can without preju-

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dice to their condition wait for the daily collection, are held for it. In the event of urgent necessity, a telephone call is sent in and a special run is made.

CHAPTER VI

FRONT LINES

To any one making inquiry in regard to conditions during the time of war, it is natural that the thing which should have the strongest personal appeal is just what exists at the actual point of conflict; where the two forces come together. From the standpoint of the medical officer, this point, while important in relation to immediate treatment, is only a step in the complicated scheme which stretches back into the interior and leads to the ultimate restoration of the wounded man to a state of health sufficient to make him a possible effective again on the firing line.

A trench is exactly what the word indicates. It is a ditch dug in the ground to a depth governed by the nature of the soil and may range from a few feet to six, seven, or eight. The

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side towards the enemy, the "parapet," is built up with sandbags. The rear slope is called the "parados." Along the line of these first trenches many casualties of course occur, not only from direct infantry assault, but from the effect of artillery fire, and it is necessary that provision be made by the medical corps for the care of men who are wounded during attacks of any kind. The first station of the medical corps for the care of wounded is the "refuge for wounded." This varies in accordance with the possibility of construction from a hole in the trench wall to a well constructed and thoroughly roofed dugout, manned by a certain number of sanitary corps personnel and presided over by a medical officer and affording fairly thorough treatment, as far as first aid goes, for any wounded who may be brought to it.

The wounded from the trenches are brought into these refuges, if unable to walk, by the regimental litter bearers and held there until evacuation is possible to the first aid post, which is

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farther in the rear. The first aid post is situated farther behind the lines at the beginning of the "boyau." A "boyau" is the communication trench which goes from the relatively-safe zone up to the first line trenches and derives its name from its similarity to the exact meaning of the word in French. "Boyau" means in French, an intestine, and the word was borrowed and applied to these approaches on account of the tortuous character of their construction, which was necessary to avoid enfilading shell-fire. The frequency of the refuges for wounded and the first aid stations is governed largely by the character of the terrain in which the operations take place. In one sector which I visited in the defenses near Verdun, on a front of some three miles, there were only two of the communication trenches, "boyaus," and I think only two refuges for wounded. The consequence was that all wounded in the trench on this front had to be brought to one extremity or the other and from there carried back by litter to the first aid station at the end of the

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two converging boyaus. Work at the refuge for wounded is necessarily of a very sketchy character; hemorrhages stopped, first aid dressings applied, and perhaps a stimulant given, but no attempt at any formal surgical care. This is deferred until the man is carried to the first aid post already referred to, and even here nothing of any importance is attempted; only that which is absolutely necessary to insure his safe transit to one of the more permanent organizations in the rear.

As typical of the circumstances attending this service, I quote the following account of a trip which I made to inspect this class of work in a French sector in a region in France, which, due to military necessity, must naturally be without a name.

I went by motor with the officer accredited to me as my guide and counselor to the headquarters of the General commanding the division, and there we picked up the division surgeon who had the direction of the sanitary work in the sector. It was a hilly country, but, in

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view of military necessity, the former trails in the region had been enlarged and completed into military roads which would have been most admirable in any section of our own country.

We went by motor, constantly up hill. At many places high brush fences had been built to hide ("camouflage") the road from German observation. After half an hour we halted in front of the Ambulance,* one of the front line units at the end of wheel transportation, except for Ford ambulances, which went half a mile further. We walked on through mud and mist down hill and up; over stones and pine needles until we reached the Poste de Secour, or first aid station, at the beginning of the approach trench which led to the front. After inspecting this, we stepped into the boyau and went on to the front line trenches. This boyau was a trench just wide enough for us to walk in and zig-zagged, so that no great length of it could be raked by shell explosions. Even in flat coun-

* In continental parlance, an "Ambulance" is not a vehicle for the transport of wounded, but any *mobile* hospital.

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try such walking is not very good, and here it was up hill all the way and muddy and rocky, and I slipped and slid and caromed from one sticky earth wall to another and sweated until I was like Mr. Mantalini, a "demmed cold, moist, unpleasant body." The blessed thing ramified and branched and right-angled almost as much as a city. I should have been lost without a guide.

In due time we came to the company shelter for the wounded, which opened directly into the boyau on one side and on the other toward the first line trenches which were less than 40 feet away. The shelter was the usual type, built into the side of the hill and heavily roofed with rock and dirt and stones. All the men in these trenches lived in them and during shell-fire only six or eight lookouts were actually exposed in the open. There was some desultory bombardment at this time, and German shells were dropping at various places along the front. One of the French hospital corps men smiled cheerfully at me and made a

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remark in French, which for a few minutes puzzled me. After thinking it over, I realized the fact that he was not only talking a foreign language, but that he stuttered while he talked it and that the idea that he wished to convey was that to-day the German shells seemed to be altogether rotten ("p-p-p-pourris")—referring to the fact that several in our vicinity had not exploded.

We were met here by the Captain in command of the sector and went out with him to make the round of the front trenches, which were only four minutes from the shelter. He explained to us that the closest point in his line was only 20 meters from the German trenches and asked that we speak softly, as they were often irritable. We made our way through 300 yards or so, which was his front, and it was very real and grim and interesting; the still men opposite their loopholes, the supply of cartridges loose in boxes, the hand grenades laid in readiness and the platforms built to throw them from. I was allowed to look through a

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slit in the steel plate, but for only a moment on penalty of having some wary "boche" shoot me in the eye. I saw a waste of jagged barbed wire and torn earth and some 60 feet away a line of raw earth which marked the beginning of militant Germany and behind which, I suppose, watchful eyes were also peering.

It smelled of dead men here; there was one that I could see hanging in the barbed wire just outside, who seemed to be a cause of particular annoyance to the French inhabitants of the trench. He was provokingly near, but due to the proximity of the lines they were unable to get out to disentangle him and place him below ground where he would be less offensive. The medical man in the sector explained to me very vivaciously that they had tried to render him less obnoxious by throwing lime at him, by squirting petroleum and crude oil, and various other ways, but that he was always in evidence when the wind was in the direction in which it was that day. There were many others further out, and, personally, I could see no particular

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reason to be so disturbed about one individual. At one end of the trench an automobile horn of the Klaxon type, I think, was fastened, and when that squawked it was better to put on your mask, for it meant that the deadly gray, green gas was coming. Aside from the occasional explosions of the German shells, it was very still, the stillness of the high places accentuated by the tension of ever waiting for the scream of shells and the scrambling rush of an infantry attack. It seemed like Sunday: the Sunday hush. Of course there were no guns, cannon, up there; it was too close for that. They were back in the valley and tossed their noisy, steel death over the ranges and into the trench under the guidance of telephone direction.

The Captain spread out his map and showed us where the lines ran. We were then over at one end of the trenches, and I left my little French doctor friend and went back with the Captain to his mess house, a little wooden shack just behind the lines, where he promised me a cup of tea. I was alone with the Captain, the

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others lagging behind. Just as the tea was about to be served, before we had sat down, there was a whining scream, which ended in a jarring explosion, just outside. On the Captain's orders, we immediately "beat it" for his dugout, which was not far away but far enough to allow two more shells to explode before we reached it. I did not know where the others had gone: that was their business.

At the same time that we were in the front trench an inspection had been made by a party of French Engineer Officers, and it is probable that the Germans, hearing an undue amount of conversation and noise in the French trench, had concluded that it would be well to shell it. For an hour and a half we sat there and listened to things blow up outside. The Captain's dugout was small, unpretentious and simple, but it seemed very comfortable. It had a bunk and table, one chair, and a small cooking stove. He cheered me by telling me that if one of the larger shells dropped on the dugout, we should all disappear in fragments, as it was only about

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half completed and by no means shell-proof.

It did not sound good to me, but the whole thing was so interesting that I did not have much time to worry. They were firing 77 m.m. and 150 m.m. shells all loaded with high explosive, and the racket was tremendous. The explosions were very sharp and shook and jarred the ground, especially those which struck in our immediate vicinity, and there were quite a number of these. Pieces rattled against the dugout, and the air was filled with the whine of falling shell fragments.

They also threw bombs ("minenwerfer"), which added to the general racket, and when the French machine guns opened up to check an infantry attack which the Germans started, it sounded like bedlam broken loose. In addition to this, they also gave us the benefit of occasional showers of hand grenades.

During the hour and a half that this demonstration lasted, they dropped forty-eight 150 m.m. and forty 77 m.m. shells on this small corner of the French lines.

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To make it additionally interesting to me, the Captain sat on one end of his bunk with his telephone at his ear and I on the other end of the bunk. From his end of the conversation I could tell what was happening and what was going to happen. I understood when "P-3" (a designation of a part of his lines) called him that P-3 reported a German infantry attack starting opposite that position, and I heard the order go to P-3 to open up with the machine guns, and sure enough, in a few seconds we heard the "put-put-put"—the "drumming of the guns." Fortunately for my peace of mind, that infantry attack died then and there; they got a very short distance beyond the German trenches.

"P-2" complained that the Boches were knocking his trench to pieces by their artillery fire. All right, we would fix that, so we telephoned to a battery back in the valley and in a few moments big French shells commenced to scream over our heads on their way to Deutschland. It must have helped, for P-2 called up

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soon after and said that the Germans had stopped shelling him.

“La Coulee” we could not get at all. Tried several times and finally gave up in disgust: it was a case of “Ligne Coupée,” which is not the familiar “line’s busy” of peaceful hours but meant that a German shell had stepped on the wire. It was like being in a prompter’s box behind the scenes, and the whole thing was too fascinatingly interesting to allow much time for being frightened. In the intervals between telephone calls we chatted of common-place things, and I made bad jokes in bad French to show that the American Army was a good sport. The Captain passed around some candy and cake which had come up to him for his Saint’s Day, and I furnished some cigars, and we munched and smoked and listened to the telephone and the racket outside, and the good little stove dried me out and I was really quite contented. You see, if one came over here and never heard shells burst or bullets whine, he could not expect to excite much interest on his

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return to his own country. I felt that I was really acquiring a noisy education which might eventually lead to a wartime diploma.

At the end of an hour and a half the whole thing stopped. It was carried out with German method in three periods of a half hour each, with an interval of some minutes between each half hour's shelling, evidently with the intention of drawing the French troops into the trenches again where they would be subjected to further shell fire in the open. The wounded from this attack were not many; the exact number I do not recollect, but due to the fact that the majority of the troops were withdrawn to shelters and only the necessary number of lookouts left to give warning of the infantry attack, the casualties were not nearly so heavy as they would have been under other circumstances.

There was, to me, a very sad ending to this experience. I have spoken of the little French doctor who was explaining to me his arrangement in his shelter for the wounded and the

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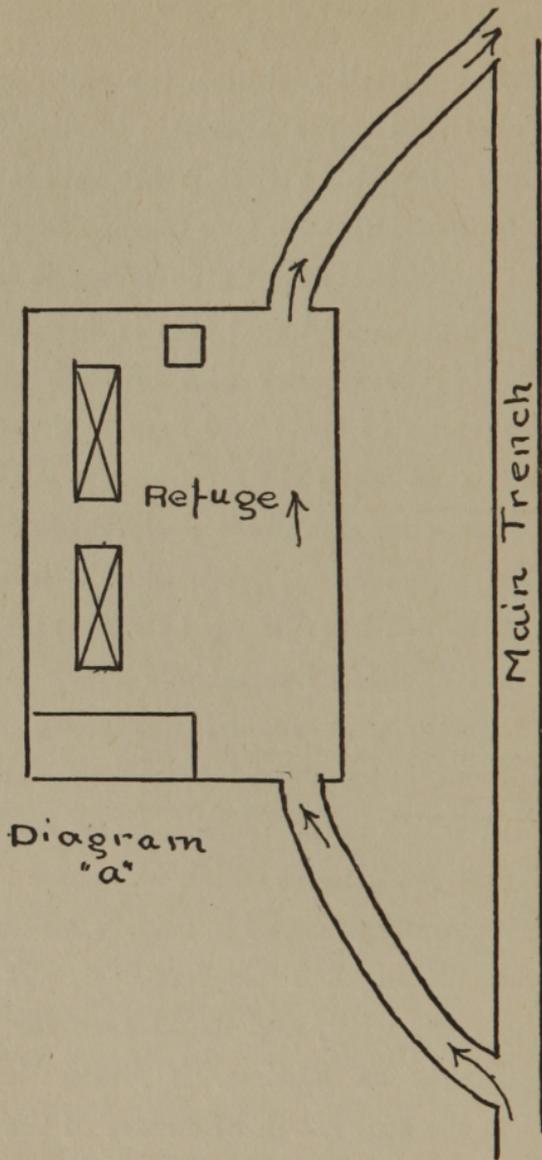
manner in which he cared for his injured soldiers. I stated that I left him in the trench just as I went down with the Captain for the cup of tea, which I never got, in his mess house. The second or third shell which dropped there fell on this line of the trenches and one of them squarely on the little doctor.

All that was left was shattered sand bags, a hole in the parapet and some red splotches and fragments of clothes on the parados. My little medical friend disappeared then and there as completely as though he had been translated like Elijah in his chariot. A six-inch shell loaded with high explosive (which means glorified dynamite) leaves little trace of anything in the immediate vicinity of its explosion.

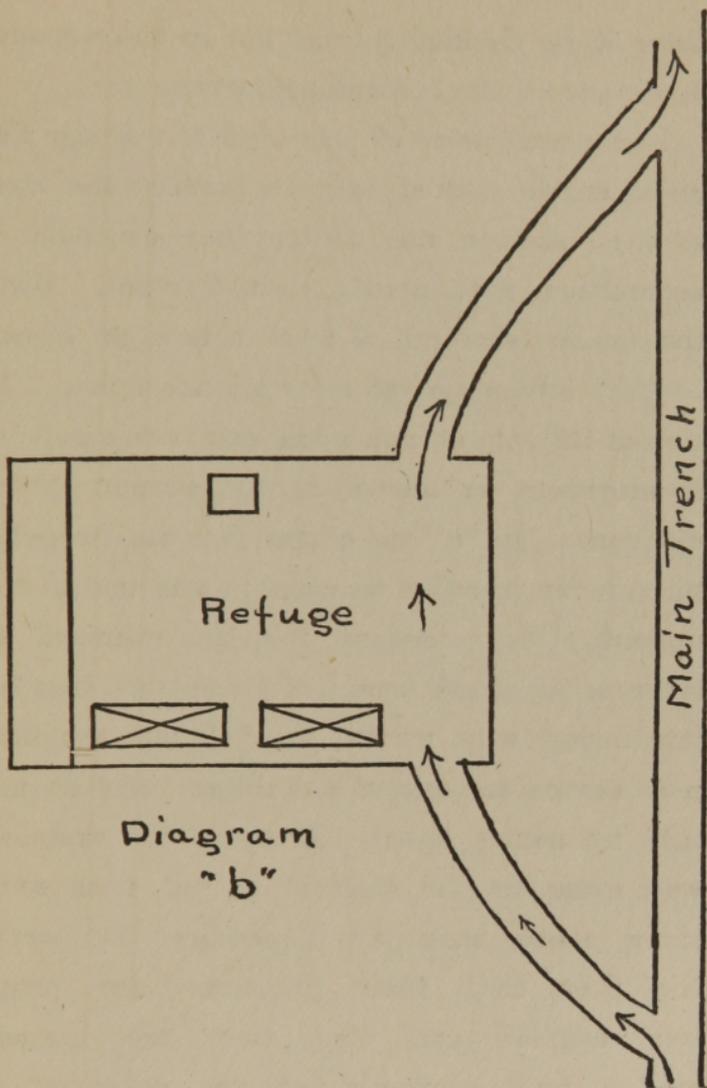
In mountain country such as that described above, the shelters for the wounded are constructed with a view to taking advantage, so far as possible, of the natural protection afforded by the ground. Instead of being entirely built up they are sunk into the side of the hill, much as one would start the tunnel of a

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mine. After a little distance, the cover of the ground overhead gives adequate shelter from shell bursts and up to that point this is provided by building up with tree trunks, earth and rocks. The extent of this covering is about fifteen or eighteen feet and this is sufficient to take care of the smaller and medium caliber shells; for those of from 220 m.m. up, there is hardly any man-made shelter which is sufficient to afford immunity. These underground burrows vary in dimensions from what is in effect a straight rabbit burrow up to elaborate systems of underground habitations which include several underground rooms, operating room, ward, waiting rooms and quarters for the detachment which mans them. I saw one such in a first line Ambulance which was some thirty feet under ground and was in reality an exceedingly well arranged little hospital. It was lighted by electricity, and could care for some thirty patients at a time. Construction of this type is the outgrowth of course of the fixed front fighting, of the trench warfare where



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there is no decided fluctuation in the advance or retreat of the contending forces.

The continuance of this kind of warfare has given ample opportunity to perfect the style of these shelters and to-day they are built in accordance with pretty definite rules. With the smaller shelters, it is of course an object to take advantage of all available space. In view of this, the entrance and exit have a definite arrangement as shown in the accompanying diagrams. In "a" the entrance is not properly placed, for in order to come in and out of the dugout it is necessary for the wounded to traverse the entire length of the shelter, thereby interfering with work. In "b" the wounded pass across one end of the dugout and do not take up needed space. Many of the wounded who come to the station do not need anything more than an inspection to verify the fact that their dressings are properly applied and that they are tagged, and a man stationed at the entrance in "b" can carry on this work without the neces-

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sity for men passing through the entire length of the shelter. Another advantage of this arrangement is that there is a smaller target afforded for hostile shell fire since the narrow dimension of the dugout is presented to the enemy. Finally, this arrangement gives the two entrances which have been shown to be a necessary precaution in the event that one be closed by a shell explosion.

The construction of shelters of this type means a great deal of labor, for the excavation in itself is no mean job and oftentimes it means work in rocky ground which magnifies the task. In some of the shelters of this style which I saw, "camouflage" had been cleverly employed. One I remember particularly which was on a hill side in plain view of the German lines. It was in a forest and in the immediate vicinity most of the trees had been felled for purposes of construction. The clever French overcame this difficulty by painting and setting up large canvas screens like a woods scene on the back drop in a theater which effectually hid the Poste de

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Secour from prying enemy eyes—and shells. The Medical Inspector with whom I visited this station told me that it was commonly known as “The Theater” and seemed amused when I told him that under those circumstances I should be very glad to meet some of the chorus.

Much has been written of “camouflage” and many jokes perpetrated at its expense, but I can assure any of the jokers that it is a very comforting sensation to know that you are traversing in *comparative* safety a road or path which without it would probably be an inferno of shrapnel and high explosive. I have only the most kindly and respectful attitude for that overworked word and all that it really means in the grim work of war.

Shelters of the type described and illustrated are of course possible only where the terrain lends itself to their construction: in hilly country. They are probably the most satisfactory kind since by burrowing into the hillside it is possible in a short distance to put enough earth over your head to protect you against the

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effect of the average shell burst. Since this is not always possible, the character of the Poste de Secour varies according to the country in which it exists.

In flat country such as that of the Somme or farther north, they often consist of a wide ditch heavily roofed with sand bags; not so secure as the hillside type, but affording the best protection under the circumstances. I have seen them established in the cellars of undestroyed buildings and in cellars which still existed under a pile of bricks and masonry, all that was left of a shell torn house. Some of them I have seen located in churches where the surgeons carried on their work near the altar and in the shadow of the cross. This did not seem inappropriate somehow, for as Christ strove to heal the wounds of the soul, so these weary French Medical men were trying to patch the bodily wounds in this His house; the house of the Great Physician. Still others I have seen which were nothing more than a sheltering angle of standing wall and battered

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débris; scant protection save from the flying steel fragments and the vicious whip of bullets.

Wherever they are located and however they are made they are a tacit tribute to the recognition that in the warfare of to-day the essential thing for the welfare of the soldier is prompt treatment; as prompt as possible. Views have changed in this respect since August, 1914. Before that time it was generally conceded that the majority of the serious surgical work should be done at some distance from the fighting front, in the Zone of the Interior. Experience proved that this was wrong, and that a man's chances for recovery decreased, to speak in terms of mathematics, in direct relation to the time which elapsed before he went on the table for operation. I do not intend to give the impression that major operations are attempted in the first line Sanitary Units. That of course is out of the question, but even so, the treatment that is accorded men at these places is much better and more thorough now than formerly, and the whole process is shoved up from the

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rear lines so that the wounded receive extended care now at a point where formerly little was done for them.

I think it cannot be difficult to understand that this front line work is hard work for the Medical personnel which carries it out. The Doctors who do it are really entitled to a different classification than that of "non-combatant." If "non-combatant" means just a man who does not fight, they fall within the category. But when you come to consider that they bear in common with their brothers of the line all the danger of these advanced positions; that they are subject to the same intense bombardment, the same shock of assault, of gas and all the nerve wracking terrors of life in the trenches, it seems as though there ought to be at least a brevet title which would differentiate between the accepted meaning of the term and the actuality in these circumstances. The wastage of Sanitary personnel has been high in the present war and, aside from my little Doctor who died a spattered mass on the wall of the

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parados, blown out of existence by German high explosive, there may have been many others who have found the end of the great adventure while bringing aid and comfort to their stricken comrades. The Croix de Guerre and the Gold wound chevron on the right arm is not uncommon on the uniform of the man who carries the insignia of the Sanitary Service.

I would not have it understood that there is any unusual courage among the men of the Medical Profession who go to war, but to correct an impression more or less current that their job lies well to the rear, safe from the carnage of the combatant forces.

I think that there is one thought which occurs to every man in contemplation of entrance into battle: whether he is nervously waiting his first experience under actual conditions, or whether he is simply going through a period of self analysis safe in his own home, with no immediate prospect of exposure to the danger of hostile fire.

That is, "What would I do the first time I

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was under fire? Would I run away? Would I be afraid?" It is I think a perfectly natural curiosity, and one that must occur to every one in his soul analysis. The answer to part of it at least, is in the record of armies since the beginning of time, for armies as a whole do not run away, and according to the law of averages the normal man is not in that respect a coward. It has always seemed to me that any man in peril of his life, in danger of immediate death, must have a certain amount of fear. That this is in varying degree, and may be lessened by constant exposure to the same sort of danger; but that at the commencement of any danger there must be for him the inevitable dread of losing that which counts most to all of us—life. Moreover, it has seemed to me that this same fear is the governing factor in determining whether one stands fast or deserts.

Man has in danger, two fears. One that he will be killed. One that he will forever shame himself in the eyes of his fellows by running away. He stands as the pivotal point in the

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balance which carries on either pan these two fears, and whichever one is the strongest, determines him as brave man or coward. In other words, I believe that the right kind of fear is really bravery.

In a little book * written by a young Frenchman named Paul Lintier who served until his death with a battery of 75, there is such a clear exposition of this that I have translated it and am quoting it here. It seems to me to sum up the situation very precisely, and we can excuse to his pride in his arm of the service the special reservation he makes for the Artillery soldier. He was killed by a German shell while serving with his battery and before he was twenty-three years old.

“As far as we are concerned, there is nothing to do. Over towards Stenay the sky line is unchanged and empty. For some hours past large shells have been dropping by threes, marking with the punctuation of their black

* “Ma Piece” By Paul Lintier. Published by Plon-Nourrit & Co., Paris, 1917.

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bursts, the fair green page of the prairie where no troops are. We are easily in range of these heavy guns and there is no certainty that at any minute a change in their elevation may not bring us under their fire. Yet no one seems to think of it.

“I sometimes wonder at the marvelous quality of adaptability which is the base of human character. We accustom ourselves to constant danger just as we do to bitter privations, to the uncertainty of the morrow.

“I used to ask myself, before the war, how it was that the aged who had almost reached the limits of human life, could live so peacefully in the shadow of imminent death. Now, I think I understand, for to us in these circumstances, the risk of death has come to be just a part of the daily routine. One counts on it and is little astonished and less afraid. And then, each day augments our courage.

“The human organism becomes callous under repeated exposure to the same terrors and the shaking nerves grow calm.

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“The steady fight for mastery of self wins in the end and *that* is the courage of the soldier. One is not born brave—he becomes so.

“The instinctive desire not to be overcome is always a factor. Furthermore, one must live, to the best of his ability, whether it be in the turmoil of conflict, or in times of peace. You have to accommodate yourself to this new fashion of life, however wretched, however precarious it be.

“Finally, the thing which counts above all else—that which makes the situation almost intolerable—is fear, the very essence of fear. That *must* be overcome, and one does overcome it.

“Together with the desire to live, no matter how wretched life may be, the sense of duty and regard for opinion—in a word, honor—is the great educational factor in determining the character of the soldier under fire. I do not claim this as original; it is merely my personal evidence in the matter.

“Furthermore, I believe that this education

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in courage is easier for us than for the Infantry, the hardest tried arm in the service. An artilleryman in action of a very truth *cannot* run away; every one in his battery would see it; his disgrace would be patent to all and beyond remedy.

“So then, fear, extreme fear, seems to me to be, in effect, the abolishing of the power of will. The man who is not capable of standing calmly face to face with danger is also in the majority of cases equally incapable of overcoming that innate, dominant sense of shame which would result from public flight. For the act of running away there is requisite a certain amount of will power, a sort of quasi-bravery.

“The Infantryman not infrequently finds himself alone while in battle. Under cannon fire a man crouched on the ground some four meters from his nearest neighbor is in reality very much alone. His individual fancies and worries absorb all his attention and from this cause he may yield to the temptation to lag,

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to hide himself and finally run away. Later in the day when he has rejoined his company it is easy to say that he lost his squad and joined another. He has good grounds for supposing that none of his comrades will know the truth—and he has this knowledge before he deserts so that he does not have to combat the overpowering repugnance to a flight in full view of his fellows.

“To stand fast under fire means much. To preserve your sang froid is another proposition in the hell of modern battle conditions. One is instantly afraid; you sweat and your body is shaken as though by an ague. It is irresistible; it seems that there is no escape from death. The form of danger is unfamiliar; one you have never known. The imagination magnifies it and you can neither think nor reason. The burst of the shells, their acrid smoke and the scream of the flying fragments add to the stupor of these first moments.

“However, neither the flash of the exploding melinite, the noise of the detonation nor the

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cloud of greasy black smoke is in itself a danger. I think the significant fact is that they are the accompanying heralds of the danger and that they are all thrust on you at once and that it is this which gives them their significance.

“Very soon one realizes that smoke in itself is harmless: that the scream of the advancing shell is the warning of its approach and of its direction. You do not turn your back at every shot and you take cover only with the certainty that it is necessary.

“Then it is that we realize that fear has not conquered us, but we it. There lies the crux of the whole situation.

* * * * *

“Another thing which makes courage easier for the Artilleryman is the very organization itself of his service. The Infantry, the Cavalry, the Engineers, each of them is a self-contained unit. For us, the Artillery, the unit is the gun itself. The seven men who serve it are the intimately interwoven brain and sinew of a

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being which with them comes to life—the gun in action.

“This interlocking of seven men, each to the other and all to the gun, renders any shortcoming so patent, so serious in its consequences that the resulting shame could not be borne.

“Then also, this close affiliation makes easy that mysterious psychologic transference of thought and soul and the presence of one or two brave and resolute spirits is often sufficient to set the standard of courage for the entire gun-crew.”

There was a Poste de Secour of the cellar type that I remember very vividly. It was in the defenses about Verdun and I had made my visit there thinking that I should be in time to see something of a rumored French offensive. As it turned out, I was a little too early and got there during the preliminary artillery preparation. Artillery preparation has been described a number of times by people who have better command of adjectives than I so in regard to what it is I merely mention that any pen pic-

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ture leaves one entirely at sea as to a realization of the actuality. It is just magnified noise which shakes your very being, physical and mental; a constant roar of the guns on your side and the exploding shells from the counter-battery work of the other.

This Poste de Secour was in what remained of the cellar of a drunkenly battered château and was in sight of those two hard fought for points, the "Mort Homme" and "Hill 304." About it was nothing but the evidence of the destructive power of high explosive shells and they were coming in with methodical regularity while I was there. The cellar itself had been shored up with heavy timber balks to give additional resistance against any direct hit. It was a vaulted chamber so low that I had to stoop to make my way about, and the only light was a few kerosene lamps and the little French hand lights without a chimney which are so common in the peasant houses. This was presided over by a French Medical officer and his detachment of "Infirmiers." An "Infirmier"

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would correspond in our own service with a Hospital Corps private who had received instruction in First Aid work and knew enough to assist in dressing the wounds.

Among them was a man who had been in the United States and I was amused, and a little touched, by the immediate interest he took in me and my uniform. He was eager to talk and my queries in regard to conditions there were often parried by him with requests for information in regard to places in my own country which he knew.

The Medical Officer said that he had been in this sector for the past ten months and would welcome life for a time in a quieter place, but he seemed proud of his work and of what he was doing for the wounded. Things were necessarily crude; you cannot reasonably expect much "de luxe" when the main and essential object is to have a place which shall not be battered about your ears by falling shell. There was an operating table for such work as was imperative; the stopping of hemorrhage

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and anything that could not be deferred until the wounded had reached the next point back. There were supplies of dressings, arrangements to give the men hot soup and some eight or ten spring bunks fastened between the uprights which shored up the cellar. There were some wounded there waiting transport to the ambulances of the rear; none very seriously hurt though the occasional blood stains on a bandage gave mute evidence that below the snowy covering there was an area of painful and tortured flesh. They were a patient and uncomplaining lot; just seemed to take it as a part of the game and during the time I was there I heard no moans, and no complainings: just the chatter of low voiced French as they exchanged views on the topics of their day.

The Medical Officer said that this was a hard post since the wounded had to be transported for some three quarters of a mile or more by hand, and litter transport through a trench is always a difficult problem. I asked him about the various kinds of special litter which have

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been devised to meet the narrow angles of the trenches and he shrugged his shoulders and said that these were well enough in their way and undoubtedly a good thing when you had them—but in a large proportion of the cases they were not available and they had simplified the matter and come to a practical solution of the matter. Each French soldier has a piece of canvas which corresponds in a measure to one of our shelter halves. These they use in the transport through the trenches.

To illustrate, he had one brought out and laid in the narrow aisle between the tiers of posts and I lay down on it. It reached from my head to about the middle of my lower leg. They took up the diagonal corners (right leg and left shoulder and left leg and right shoulder) and knotted them over the center of my belly. Then a pole was slipped under the knots and as they raised me from the floor the canvas enveloped me as in a hammock. Unless there is a fracture of the leg below the knee, the legs swing down from the knee without support, thus

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shortening the length of the litter and making it possible to turn corners. It felt comfortable and seemed practical, for the man almost always has this sheet with him and it is not difficult to find a short pole or piece of plank to complete the apparatus.

I was the recipient of a pretty piece of courtesy in this sector. The men in the trenches amuse themselves when they are not busy killing the Boche or being killed by him, by making such articles as their ingenuity and skill suggest from fragments of shell and shell case. I stopped in a trench to watch one of these first line mechanics who was busy with file and pliers and a little soldering outfit making "briquets" which are the cigarette lighters which are so common in France as a substitute for matches. There were several completed on the fire step before him and knowing that they were made for sale I took out a roll of franc notes after examining several of them. Before I could make an offer this bearded dirty artisan turned to me with a delightful smile and said: "Mon-

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sieur is not only the first American Officer who has been in this trench, but also he is the first American Officer I have had the pleasure of seeing. That being the case, will monsieur le Majeur (general term for a Medical Officer) forget for a minute that I am merely a French Poilu, allow me the courtesy that exists between all gentlemen of whatever nation and accept with my compliments such of these briquets as may seem desirable to him? Please as a favor to me."

Indeed I did. I blushed a little, put my notes in my pocket and took the one I liked the best and thanked Monsieur the Poilu for his fine courtesy and good feeling. I still have that briquet with my initials on it and the date and the name of the sector. It was continual little acts of sincere kindness such as this that endeared the French people to me. In two years I never knew one who was not kindly and considerate.

CHAPTER VII

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DUTY such as it was my lot to perform for two years in France must, of necessity, have its sad side as a marked feature. Constant association with the maimed and the sick does not make for a cheery existence.

Yet, even so, there was much about it which was very well worth while, aside from the professional interest which can be understood. From the standpoint of the wounded themselves, there was the lesson of cheerfulness in adversity, of patience under severe loss and the evidence of trying to make the best of what circumstance had left to build up and go on with. I have referred in several of the preceding pages to this trait among the wounded French and it seems to me now, as I look back, to be par-

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ticularly fine and something that it was well to have seen and to know about.

This cheeriness had no evidence of being forced; it seemed entirely spontaneous and to be an innate part of the character. They met things with their chins up and with a grin. They had a joke or a comical word for almost any situation providing it did not carry them beyond the bounds of their strength. Then, though there might be no smile nor jest, the dignity with which they closed their teeth and silently endured the necessary merciful torture was as fine to see as the lightheartedness of their easier moments.

It is fortunate that even a Military Observer of medical procedure can find at times a side of life that is not quite so soberly tintured with pain and sadness as that which falls in the field of his duties. Aside from those with whom I came in contact in the course of my official wanderings, I made many other friends. I made many among those with whom I was thrown officially and as I came to know them

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better I was impressed with the fine courtesy which was everywhere shown me.

We, here in the United States, have some erroneous ideas in respect to the people of France. The view that they are volatile, and not a race of fixed determination and perseverance, is altogether at variance with their true character, as will soon be apparent to any one who is associated with them. Their true quality of determination and dogged persistence has been too clearly demonstrated during the struggle with Germany to allow one to continue in this estimate. Again, I think that many of us have been taught to believe that "French courtesy" was a trait which existed only so far as a surface manifestation went; that it was superficial and not whole hearted. My own experience went entirely to disprove this and I found not only the courtesy of manner of which I had heard but a simple and direct sincerity and kindness which added the solid body to what without it would have been a shallow veneer. I had ample opportunity to judge

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and was speedily convinced that my former estimate had been altogether wrong.

Furthermore, they are not, physically, a small people. They are not perhaps on the average up to our standard of stature, but they are extremely stocky and the men as a rule well developed and thick through the chest. The French "poilu" trudges around winter and summer loaded down with various articles of equipment which make him look like an animated Christmas tree, and he does it as an entire matter of course and would be surprised, I think, if any one suggested that his load was in any way excessive.

A story was told me in this connection which I think illustrates the point. On a long march, one of the privates added to his own load the pack of a comrade who was ill and not fit to bear his own burden for the time being. One of the Company Officers noticing the circumstance kept his eye from time to time on the cheerful one who was doing double carrier duty. As he passed him later in the march he was

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astonished and a little perturbed to see that in addition to his own and his comrade's pack the soldier had super-imposed a good sized dog, the company mascot. He called the soldier's attention to the fact that he was already carrying two loads and asked what he meant by adding the dog to his already too large pack. The Poilu looked at him gravely, and with the air of explaining a perfectly simple state of affairs responded, "Mais, mon Capitaine, le chien est fatigué." I do not know whether that has any foundation in fact, but I do know that they carry with indifference as a daily routine a miscellaneous assortment of equipment that it made me tired just to look at.

One afternoon I was walking down the Champs Elysée between two French officer friends. One was six feet four and the other six feet three. Stopping I commenced to laugh: one of them said with the permissible familiarity of friendship, "Well, idiot, what are you laughing at now?" The other joined in, "Yes, tell us the joke in order that we may

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laugh together if it is so funny." I explained that I was thinking from my lowly altitude of five feet eleven inches of the description in my early school Geography which stated that "The French are a slight people, gay hearted and fond of dancing and light wines." We laughed together then, and if I am not mistaken in my recollection, went across the Avenue to Fouquet's, the famous, where we demonstrated the fact that even if they could not live up to the tradition in regard to the slight people, they were both light hearted and appreciated the vintage of the country.

One of the two gave me evidence of his sincerity and feeling the day that news came that I was no longer a Benevolent Neutral, but had the right to be considered as one of them.

My office telephone rang and I recognized the voice of my friend who asked in some agitation if I should be in the office for a few minutes longer. I assured him that I should and he said that he wished to see me on a matter of im-

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portance and would be there in a very short while.

He came hastily into the office with a broad grin on his face and immediately said, "Church, I have told you a lie." I interjected, "Probably not the first, Charles," and he went on not heeding the interruption. "I have no business to talk, but I have just heard the news of the United States and I did not wish any one else to be the first to greet you as an Ally: please tell me that I am the first." I assured him that he was and with a whoop he gathered me to a very broad, blue clad French breast and I emerged with aching ribs and somewhat heightened color, to realize that I had been kissed on both cheeks by a very enthusiastic and also a very capable and distinguished Officer of the French Army. A New England conscience forces me to admit that, on this occasion also, we motored to M. Fouquet's and cemented the new union in a perfectly proper and excellently well made concession to the Western Hemisphere, a Martini cocktail, "bien sec." The

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French love to tease, "taquiner" as they put it. They are as good at it as any of us Yankees and quite as clever. They tease each other without end, and if they decide that they like you, they tease you too: and you do not mind it, for it is very good natured and you tease them back again and if you get the best of one of them his comrades will take it up with him and guy him unmercifully.

Their relations with each other in the Army are simple and in a way less formal than in our own service. I do not mean to intimate that there is any lack of discipline nor loss of the formal courtesies, but they can seemingly let down the bars in situations where to us there would be no passing. On one trip I made, I had as my *mecanicien* a very nice chap who was the grandson of Violet-le-Duc, the famous architect under the third Napoleon. I had a letter to a Medical Officer with a certain army and, when in answer to my message sent in to his office he came out to greet me, the first thing he did after a hurried word to me was to go to

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the other side of the automobile, pull my *mecanicien* out by his collar, throw his arms around him and laugh and chatter for some minutes. He was a Major in the Medical Corps and the *mecanicien* a private in the Automobile Service. He explained that he and the *mecanicien* had been desk mates in school in Paris twenty years before and that this was the first time they had met; and he asked me with a little doubtful touch of embarrassment, if it would offend me to come to dinner that evening with him, the *mecanicien*, and his friend the chauffeur.

I told him I thought I could make that concession in view of the fact that the chauffeur, the *mecanicien*, my companion and I had been eating all our meals together since we had started about a week previously. We had a jolly dinner that night and the next night the *mecanicien* entertained in our honor. It was all simple and natural, and when we set out on tour with the machine the *mecanicien* was the careful, respectful private, watchful to do

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everything possible for the comfort of the officers whom he served and not at all disturbed or puffed up by any familiarity which might have engendered from the fact that we had all been dining and drinking good French wine together the night before. They seem to slide easily from the relation of strict Military régime to the more personal one and back again with never a touch of undue or offensive familiarity. I do not think we could do it in our own service, but as the old song puts it, it is, I expect, "because we ain't built that way."

For some months, while I was serving on our own Headquarters Staff, I was billeted with two very delightful old French people. Monsieur and Madame R——. When I moved into my quarters I think they were a little dubious as to what the barbarian American might be like and I remember the look of relief which flitted over Madame's kindly face when I took off my cap and, apologizing in my best French for the intrusion, assured her that I would be as little trouble as possible. Figuratively, she

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took me to her heart then and there and from that time on I was to all intents and purposes a member of the household, and so they dubbed me, "le fils du maison." Her husband was seventy-two, spent much of his time riding a bicycle and all the rainy, cold days out with a gun and dog, hunting. Madame was some sixty odd and quite as active as her husband. He was an inveterate tease and between us we used to plague Madame to her pretended distraction, but I know she liked it. They did everything possible to add to my comfort in their spotless house and when my orders took me from the village and from France, she put her arms around my neck and frankly crying, said as she kissed me good bye, "But my son, my son, we shall miss you so." It is not hard to like, to be fond of, people who treat you so.

My office there was about a mile from the house where I lived with M. and Madame R—— and in the winter it was quite dark when the time came for me to go home: the early darkness of winter at half past five. Almost every

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evening I walked home with a young lady; for a long time I did not know whether she were pretty or not, nor her name. She never asked me to call in spite of the fact that she lived just across the street from me and that we always held hands as we came along the dark streets. I found out later that she was pretty, and that her name was Marcelle. You see Marcelle was just nine years old, and she got out of school just about the time I came home. And so, when I got to a certain corner there was a patter of little feet, the swish of thin little skirts, a little cold hand slipped into mine and a childish treble which piped, "C'est Marcelle, mon Colonel," and away we went, the big American officer and the little French refugee from invaded France, for such she was.

She told me that the arithmetic had been hard that day, or the teacher cross, and of what she hoped to have for supper and the news of mother and her little brother. She was always cheerful and always very punctilious, with her "Oui, mon Colonel," and "Mais certainement,

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mon Colonel," and when we parted at the door she never failed to wish me a good appetite and sound slumber. Poor little waif; she had lived in Picardy somewhere until driven out by the German invasion when they had drifted to this town where her mother by dint of daily toil and such aid as the village people could give her, kept the little family in food and the meager black they wore. The husband and father had been called, as all France was, to the colors and after one of the engagements news came that he was missing. Just that one agonizing word: and from that time on he had been only a memory, a wistfully hoped for person who would never return to find those whom war and invasion had driven from the humble home in Picardy so far afield. Not all the tragedies are in the men who are killed or wounded. If war is hard for those who bear the brunt of the attack and whose bodies carry the mark of hostile steel, there is still a world of silent agony, of waiting suffering for those who can only bear with weary patience the days

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and months which elapse after son or father or husband has gone to the wars.

To the killed and the wounded there is added that category which has always seemed to me to be, by the very uncertainty of it, the hardest to bear. I mean the hopeful, hopeless, state which is entered under the head of "missing." "Missing" may mean so much, and at the same time, so little. In the majority of cases it signifies that he whose name is so carried is killed. Either lying undiscovered in some part of that withered stretch called "No Man's Land," or that he has been literally blown to nothing by the rending power of high explosive, or perchance that the shell which killed him has covered his torn body with a mantle of earth which hides it from all searching eyes. There are others missing too; those who have not fallen in battle. The fate of many who had the evil fortune to fall into German hands in the captured country will be for all time a mystery to those who wait with wistful eyes and aching hearts for news which will never come. It was

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this variation of conditions, this constant change of scene and association which gave a peculiar interest to the work as Military Observer.

To the zest of the pursuit of desired information was added the contact with many people of interesting personality, and the constant change of environment. While still the representative of a neutral power I spent a month on the island of Corsicá. During the days prior to the rupture of our peaceful relations with the German Government, our Embassies, both at Paris and Berlin, were charged with the supervision of the conditions existent in the various prison camps of both nations. Complaints were referred to our Ambassadors by the warring powers and investigated through this agency. I was sent with others delegated from our Embassy at Paris to look into conditions in the Corsican camps and, as a consequence, spent a month in the Corsican mountains. It was interesting aside from the duties to be performed for the country is probably

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the most picturesque in the world and the opportunity to explore it by automobile an unusual privilege.

So far as the camps and the conditions in them were concerned, there was little to take exception to. The lot of a prisoner of war is naturally not an enviable one and the restriction and the routine of course irksome. So far as we could determine, those who were confined were as well treated as the resources of the state permitted. There were no luxuries but when the men of France were undergoing what is incident to life in the trenches it would be folly to expect better for those who had fallen before the prowess of their arms. The Germans were better housed than the French in the field and as well fed. The general objection seemed to be, not that they were badly cared for, but an unreasoning objection to being prisoners at all. I could well understand this, for to me being a prisoner of war with the attendant inaction and dull routine seems one of the lowest forms of amuse-

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ment. In one of the camps I asked if there were present any one who spoke English. One of the men stepped forward, and since the French Captain who commanded the prison also spoke and understood English, I was allowed to talk to the man in that language. I asked him various questions in regard to conditions which he answered fairly with a degree of philosophy, and concluded by saying, "I have no complaint to make of my treatment, Major; the French, I do not doubt, do the best they can for us, but I must confess that I am not as well cared for as I was before I was interned." In answer to my inquiry, he replied, "Oh, before the war I was one of the head waiters at the Ritz in Paris, and there is a quite marked contrast between conditions there and here in Corsica."

What sympathy I had, not much frankly, was with these civil internes rather than with the fighting men who had been given their chance, had taken their turn in the trenches and by the fortunes of war were now

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spared the hazard of further danger. The civilian had not even that service to look back on. Merely the knowledge that he was so much available man power that had been lost to his Government through the inadvertence of his having been in the wrong place at the wrong time. At the hotel in Bastia we were waited on by a cheerful Boche who answered to the name of "Willie." Willie had been, prior to hostilities, a waiter in the Continental hotel in Paris and according to his own statement, having little taste for martial career, had decided to emigrate to the United States when war seemed imminent in 1914. He delayed one steamer too long and the drag net swept him up and landed him in this Isle of the Vendetta, there to regret his procrastination. He was a good waiter and aside from the fact of his nationality perfectly acceptable. He spoke French of sorts and English of sorts also, but I think that there was always in his square head an undercurrent of German stupidity. I bought one of the cheeses which they make in

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Corsica and which are much like the Roquefort of France. As it developed a frank cheese aroma, I asked Willie to wrap it and mail it to my address in Paris, rather than have it continually advertising its existence in my belongings. The next day I asked Willie if he had executed my commission and with the pride of duty well accomplished he replied, "Oh, yes, sir, I wrapped him and sent him to-day; and that he might go safely I wrapped him in a bottle." Now that cheese was some nine inches square and how even Willie could have "wrapped him in a bottle" was beyond my comprehension. One of my companions asked me if "wrap" meant anything in French. It did, and it does, and Willie wandering in the mazes of his three tongues had put a French construction on that good English word and turned it into "raper" which means "to grate." On my arrival in Paris I found a very large bottle into which had been grated with methodical German thoroughness all of that very good cheese.

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Paris in war is not the Paris of peace. The beauty of the city is the same but the light-heartedness is gone. It is no longer the playground for all the world but the heart and soul of a very real and very near and very grim struggle. It is a sad city but not a despondent city. There is everywhere in it the evidence of the sacrifices a nation is making to preserve its integrity. Men in civil clothes are only those who are unfit for Military service: there are many women in black but they have not lost their courage nor the proud consciousness that the loss which is theirs means a supreme gift to the State. There is no music save the occasional rhythm of an army band which escorts some regiment on its way to the front, or follows a black catafalque to the last resting place in Père la Chaise.

Dance they do not in war time and all cafés close decorously and finally at half after nine. It is a Paris shorn of the frivolities, peopled by wounded men who are still gay on their crutches, and with the ever-deferred-to "per-

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missionaire" who has come back to "Paname" for the joy of his ten days' respite from the trenches. It is an interesting world, and I think more cosmopolitan now than it was in the days of happy peace. One meets here now, as he used to at Shepherd's in Cairo, all the world from everywhere and this is natural since our entry as an Ally, for to this city, the heart of France, come all those who can wheedle the State Department into issuing that *rara avis*, a passport to France.

I read the other day, the answer of an Aviator who was asked the most thrilling moment he remembered in connection with the war. It was, "Pershing's arrival in Paris."

I should have said the same thing. You see, for many months we of the American Military Mission had been here, in the heart of things; becoming each day more and more imbued with the spirit which was later to actuate the whole Nation. Forced by the necessities of Diplomatic custom to preserve a smiling and impersonal front with never a chance to express the

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convictions which had grown up within us; drab as our sedate civilian attire and politely tolerated by the French as some curious kind of third sex.

And then came the April 6, 1917, and the right to put on the service uniform and know that it stood for a power of help and not as the badge of an indifferent foreigner. And after that, Wednesday, May the thirteenth, when Pershing arrived as the visible evidence that we were to take our part in the struggle.

It was a very wonderful coming. There was no notice of it in the morning papers: no reference in those at noon, and only a short note in the evening press which was on the streets at four o'clock. How all Paris learned of the fact I do not know, but learn they did and the ovation they gave to this General from over the sea was wonderful to see and doubly impressive from the fact that it was impromptu.

At five-thirty, the Gare de l'Est was crowded and surrounded by a dense pack of people. Inside, preparations had been made for a fitting

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reception. Joffre was there, and Poincaré and many high officials, and drawn up on the station platform was a battalion of Infantry in full marching order and flanked by the band of the Garde Republicaine. The arrival of the General in the station, his greetings by the high French officials, the blare of the band, the French veterans who stood fixed at "present arms"—all this was impressive, but to my mind it was insignificant in comparison to the homage of the waiting thousands without.

All the way down the rue Lafayette, appropriate entry for the United States on such an occasion, and on over the two miles which lay between the station and the hotel, these Paris streets were dense with those who wished to see the vanguard of the new Allies. There was no hysterics, no superabundance of enthusiasm, but a sober confidence, an apparent belief that the force needed to weigh down the scale had come at last. There was to me something inexpressibly touching in it; something that thrilled one and made the whole being tin-

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gle with pride and emotion. As General Pershing went out on the balcony of the Hotel Crillon facing the Place de la Concorde and bared his head to the cheering crowd below, one was conscious of the emotion which stirred him, which must have been inevitable in the face of such a demonstration of faith and confidence and I think we all had an inkling of the thoughts which must have been his.

It was a spectacle I shall always remember and be glad to remember: I am proud to think that I was permitted to see it and that there was accorded me, before and after this, some chance to aid in the common cause, to fulfill that which is the wish of every normal man, to give of his own effort the best he can when his country calls.

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