The National Archives Education Service

# Medicine on the Western Front (Part one)

## How did trench warfare affect injuries and treatment?

## Printable Source Pack – Transcripts

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## Source One: Injury Classification (MH 106/279)

This source is the classification of wounds and injuries list from the front of an *Admission and Register book* for No.3 Casualty Clearing Hospital which reveals the huge range of injuries dealt with by army medical units. (MH106/279)

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*Wounds and Injuries in action to be entered according to the following classification*

I. Gunshot wounds of the Head-
   1. Contusions and simple flesh wounds of scalp: slight/severe
   2. With fracture of the cranium, without depression
   3. With fracture of the cranium, with depression
   4. Penetrating the cranium
   5. Perforating [the cranium]

II. Gunshot Wounds of the Face-
   1. With simple flesh contusions and wounds: slight/severe
   2. With fracture
   3. Ditto with lesion of the: (Any important structure or organ to be noted)
   4. With fracture of the lower jaw

III. Gunshot Wound of the Neck-
   1. Simple flesh contusions and wounds: slight/severe
   2. With injury of the: (Any important structure or organ to be noted)

IV. Gunshot wound of the Chest-
   1. Simple flesh contusions and wounds: slight/severe
   2. With injury of bony or cartilaginous parietes, without lesion of contents
   3. With lesion of contents by contusion, or with non-penetrating wound
   4. Penetrating
   5. Implicating contents

V. Gunshot Wounds of the Abdomen-
   1. Simple flesh contusions and wounds: slight/severe
   2. Contusion or non-penetrating wound, with lesion of
      (Any important structure or organ to be noted)
   3. Penetrating or perforating with lesion of
      (Any important structure or organ to be noted)

VI. Gunshot Wounds of Back and Spine-
   1. Simple flesh contusions and wounds: slight/severe
   2. With fracture of vertebra, without lesion of spinal cord
   3. With fracture and lesion of spinal cord

VII. Gunshot contusions and wounds of the perineum and genital and urinary organs, not being at the same time wounds of the peritoneum.
   (Any important structure or organ to be noted)

VIII. Gunshot Wounds of the Upper Extremities-
   1. Simple flesh contusions and wounds: slight/severe
   2. With contusion or fracture of long bones
   3. Simple fracture of long bones by contusion
      (Humerous
      (Radius
      (Ulna

4. With compound fracture of
(Ulna and Radius
(All three bones
(Carpus and metacarpus
(Phalanges

IX. Gunshot Wounds of the Lower Extremities-
1. Simple flesh contusions and wounds: slight/severe
2. With contusion or fracture of long bones
3. With simple fracture of long bones by contusion
(Femur
(Tibia only
(Fibula only
4. With compound fracture of (Tibia and Fibula
(All three bones
(Tarsus and metatarsus
(Phalanges

X. Gunshot Wounds with direct injury of the large arteries, not being at the same time cases of compound fracture.

XI. Gunshot Wounds with direct penetration or perforation of the larger joints. Joints to be named. (With fracture of the bone/Without fracture|)

XII. Gunshot Wounds with direct injury of the large nerves, not being at the same time cases of compound fracture

XIII. Sword and Lance Wounds of: (Structure or organ to be noted)

XIV. Bayonet, Wounds of: (Ditto)

XV. Miscellaneous Wounds: (Ditto)

## Source Two: Work of an ambulance unit (WO 95/4117)

Extracts from the War Diary of the 44th Field Ambulance [Royal Army Medical Corps] a mobile army medical unit operating near the front line, July 1916, October 1916 (WO 95/4117)

WAR DIARY

or

INTELLIGENCE SUMMARY

Emergency Stretcher Bearer unit

| Place | Date | Hour | Summary of Events and Information | Remarks & references to appendices |
|---|---|---|---|---|
| Boulogne | 1/7/16 | | No 3783 Private H. Smith admitted to Hospital. No 185 Corporal G. Hammon posted to Details- struck off. | |
| | 2/7/16 | | No accused or sick. About 2.30 pm received a telephone message from D.D.M.S. [Division Director of Medical Services] to send 50 stretcher bearers up the line at once. Fifty N.C.O.s & men paraded & left the Marlborough Barrier Calais Road about 3.30 pm. | |
| | 3/7/16 | | Emo [emergency] calling for parties at all times. Landing Hospital ships. Sudden message in the morning to send two parties of 50 men each, one to 34 C.C.S. [Casualty Clearing another to 36 [Casualty Clearing Station Station]. Both parties left completes about 2.30pm. | |
| | 4/7/16 | | Only 163 N.C.O.s & men left at Headquarters, constantly backwards and forwards to docks, landing Hospital ships. | |
| | 5/7/16 | | No. 2966 Private. Miller admitted to Hospital No. 6710 Private Crougham examined by mental specialist. Sent to hospital-insanity. | |
| | 6/7/16 | | Two men sick, no accused, strength remains the same. Bearers being helped at the docks by other details. | |

WAR DIARY

or

INTELLIGENCE SUMMARY

Emergency Stretcher Bearer unit

| Place | Date | Hour | Summary of Events and Information | Remarks & references to appendices |
|---|---|---|---|---|
| Rouen | 3rd Oct.<br><br><br><br>Oct. 4th<br><br><br><br>5th | | During the past week from 25th Sept.-0ct.2nd the motor ambulances have been constantly at work detraining large numbers of wounded & taking wounded from Hospitals to trains & ships.<br><br>Trains off-loaded loaded ships flotilla<br>[ambulance barges] off loaded [ambulance barges]<br>9719 2746 1554 92<br>Total 9811 4300<br>Ambulance train No.15 evacuated at 4.30 am<br>Ambulance train No.18 evacuated at 10 am<br>Ambulance train No.18 loaded for Havre 4 pm<br>Ambulance Flotilla No T unloaded & patients transferred to No.18 train<br><br>At 9.30.am Hospital Ship *St George* was loaded | |

## Source Three: Medical plans for a raid (WO 95/1157)

Map and extract from Appendix I to War Diary of A.D.M.S [Assistant Director of Medical Services, 4th Cavalry Division, on the Medical Arrangements for the raid on Cologne Farm [near Hargicourt in Picardy] 29 June 1917 (WO 95/1157) *Advanced Regimental Aid Post: ADV R.A.P.

Medical Arrangements for the raid on Cologne Farm

(1) With the raiding party:-
8 Regimental stretcher bearers
4 Field stretchers
2 Haversacks with shell dressings
28 ammonia capsules
8 P.H. Helmets

The above will be divided between the Northern and Southern Platoons and in addition 2 stretcher bearers with two field stretchers will be stationed at the N.W. corner of the slag heap. The 10 regimental stretcher bearers will be provided by Major TERROT and the equipment mentioned above will be provided by Captain HILL R.A.M.C. at BIII subsector headquarters by 10 am on 1-7-17

(2) At the advanced Regimental Aid Post at L5C.8.6.[Map reference] will be:
Captain HILL R.A.M.C.
1 Indian Ward orderly
4 Regimental stretcher bearers
14 Ammonia capsules
10 P.H. Helmets
---

(2)
2 field stretchers
2 trench stretchers
1 wheeled stretcher carriage
All the above will be furnished from the 4th Dismounted Brigade and in addition the following will be supplied by the Emergency Bearer Party (to be handed over to Captain HILL at BIII Subsector headquarters by 9 am 1-7-17)

1 Field Medical Companion
1 Field Surgical Haversack
1 Water bottle
2 Haversacks with shell dressings
4 Men of the Army Bearer Corps
1 Wheeled stretcher carriage
2 Field stretchers (reserve)

(3) At the advanced Regimental Aid Post at L.11b 6 8:-

The sub assistant Surgeon (C.I.H) [Central India Horse regiment]
1 British Medical Orderly
4 Regimental stretcher bearers
2 Field stretchers
2 Trench Stretchers
14 ammonia capsules
10 P.H. Helmets
1 Wheeled stretcher carriage

# Source Five: Collection & caring for wounded (WO 95/1703)

Two extracts from a war diary which reveal problems relating to collection of the wounded, March 1915 and 24th Field Ambulance plans to receive the wounded at Sailly, May 1915 (WO 95/1703)

WAR DIARY

or

INTELLIGENCE SUMMARY

Emergency Stretcher Bearer unit

| Place | Date | Hour | Summary of Events and Information | Remarks & references to appendices |
|---|---|---|---|---|
| | March 10th 1915 | | There are a good deal of delay in the early part of this day in collecting wounded for two reasons:-<br>1. The ambulance wagons were not allowed to go nearer the action than ROUGE CROIX.<br>2. Only one bearer subsection per field ambulance was ordered forward<br>3.15 pm B & C stretcher subdivisions & all ambulance wagons ordered forward.<br><u>Influx of wounded</u><br><u>Evacuation</u> from field ambulance by British Red Cross Society cars. On the whole this worked very well; sometimes there [was] some delay. The great difficulty was the time necessarily taken to dress cases with multiple wounds, mostly shrapnel. | 24th Ho. Ambulance |
| | 11th | | Still many wounded | |
| | 12th | | " " " | |
| | 13th | | Fewer wounded<br>… | |

WAR DIARY

or

INTELLIGENCE SUMMARY

Emergency Stretcher Bearer unit

| Place | Date | Hour | Summary of Events and Information | Remarks & references to appendices |
|---|---|---|---|---|
| SAILLY | May 1st 1915<br>6th<br><br>8th | | A Section moved from BAC ST MAUR to our Headquarters here.<br>Ordered to send party to repair Corduroy road from H.33a 3.0 to H.32.a.8.10 [map references]. Both ends were repaired.<br>Preparations for reception of wounded: [see diagram provided]<br>i. Accommodation etc<br>ii. Material<br>At **1** & **4** the mobilization equipment of A & B Sections respectively were used at the other places boxes of dressings and comforts were made up for use. | [Diagram to show location of sitting and lying cases] |

| | Medical Officers | Sitting cases | Lying cases | Dressing Rooms |
|---|---|---|---|---|
| **1** | 3 | 70 | 15 | 2 |
| **2** | | | 10 | |
| **3** | | | | 1 |
| **4** | 3 | | 50 | |
| **5** | | 5 | 20 | 1 |
| (officers) **6** | | 70 | | |
| | 6 | 145 | 95 | 4 |

# Source Six: Stretcher bearer casualties (WO 95/2399)

Report from the War Diary of 75th Field Ambulance (WO 95/2399)

EXTRACTS FROM 74th Infantry Brigade Reports on Operations August 10th, 11th, 1917
A.D.M.S. No. S.63. 21.8.17.

R.A.M.C. Arrangements

17. R.A.M.C. arrangements proved very satisfactory in spite of the great difficulty caused by the long carry. These shewed a great deal improvement on the arrangements at MESSINES, although the conditions there were nothing like as unhealthy. Each Battalion had a R.A.P. [Regimental Aid Post] behind its line in the forward area. That of the 8th Loyal North Lanes near RED LODGE was very heavily shelled and eventually demolished. 13th Cheshire Regiment and 2nd Royal Irish Rifles evacuated by a relay post in CHATEAU WOOD to BIRR CROSS ROADS A.D.S [Advanced dressing station] (77th Field Ambulance). 9th L.N.Ls [Loyal North Lancashire Regiment] and the 11th Lancashire Fusiliers evacuated via Collecting Post in Wood about J.1.c.10.10 to RAILWAY WOOD (76th Field Ambulance). From BIRR CROSS ROADS wounded were evacuated on motor ambulances.

Stretcher-bearers suffered very heavy casualties, one unit having 42 casualties out of 48. All units have emphasised the excellent work of their Battalion Stretcher-Bearers. German prisoners were much used for carrying stretchers and worked well

# Source Seven: Lessons learned in service (WO 95/1703)

Extracts from a war diary of 24th Field Ambulance which outline some the difficulties faced by the unit (WO 95/1703)

| WAR DIARY 24th Field Ambulance 21<br>or<br>INTELLIGENCE SUMMARY<br>Emergency Stretcher Bearer unit | | | | |
|---|---|---|---|---|
| Place | Date | Hour | Summary of Events and Information | Remarks & references to appendices |
| | May 12 1915 Cont'd | | The following points arise out of these operations.<br>i. Field dressings: these are applied too tightly. The bandage is very thin & when damp becomes a constricting cord. Several cases has oedematous limbs [build-up of fluid in the body] for this reason. If cases cannot soon be collected the dressings should be changed, otherwise they get impervious [unbreathable] from dried discharge & retain discharges in wounds. Some cases out several days without dressing did better than those who were dressed early but got the dressings impervious.<br>ii. Wheeled stretcher frames, allotted now 2 per ambulance helped greatly. There should be at least 6 per ambulance.<br>iii. There is a need for a large canvas [tent] on poles to act as a shelter where wounded have to be grouped out in the open, e.g. at a point such as a wagon rendezvous.<br>Extra Bearers & Medical Officers. Casualties occur too rapidly in some parts of an action to be dealt | |

| WAR DIARY WAR DIARY 24th Field Ambulance 21<br>or<br>INTELLIGENCE SUMMARY<br>Emergency Stretcher Bearer unit | | | | |
|---|---|---|---|---|
| Place | Date | Hour | Summary of Events and Information | Remarks & references to appendices |
| | May 12 1915 Cont'd | | with by the Field Ambulance concerned. Arrangements should be made beforehand, in the case of a planned action, for stretcher bearers & officers of other Field Ambulances belonging to troops which are not at all or but lightly engaged to be temporarily transferred for duty where wanted.<br>i. Extra motor ambulances. There should be restored our normal establishment i.e. seven instead of four as at present. They can easily go where horsed vehicles cannot & their evacuating power is greater- at least four fold.<br>A Divisional Ambulance Transport officer should be appointed from among the Transport officers of the Field Ambulances to regulated their traffic & divert the vehicles to points where they are most wanted. | |

# Source Eight: C.C.S. admissions (MH 106/279)

Some extracts from admission and discharge registers compiled by No.3 Casualty Clearing Station in France (MH 106/279)

ADMISSION AND DISCHARGE BOOK

MEDICAL RESEARCH COMMITTEE, STATISTICAL DEPARTMENT…

| Regiment Battalion Corps Unit | Squadron Battery or Company | Regl. No. | Rank | Surname Christian Name | Age | Service | DISEASES (Wounds & injuries entered according to classification) |
|---|---|---|---|---|---|---|---|
| London Scott. (T.F.) | F | 2064 | Private | Pinkerton C | 18 | 1 | Impetigo [bacterial skin infection] |
| 6th Ambulance Train | | 1439 | " | Ramsay W.D. | 29 | 11 | Tuberculosis, Pulmonary |
| Kings Royal Rifle Corps | | 7077 | " | Tyson T | | | G.S.W [Gunshot wound] Head |
| Shropshire Light Infantry | | 8263 | Sergeant | Williams N | | | Pneumonia |
| Northumberland Fusiliers | | 2559 | Corporal | Dawson J | | | Dysentery |
| Army Service Corps | | 319 | " | Smith F.W. | | | Contusion Knee |
| Army Veterinary Corps | | 225 | Private | Clements W.G. | | | Contusion Knee |
| 1st Leicesters' | | 6646 | " | Bird W | | | G.S.W. [Right knee] & Wrist |
| 2nd Kings Royal Rifles | | 5622 | " | Hartley W | | | G.S.W. [Right arm] & leg |
| 9th [Queen's Royal] Lancers | | 4283 | " | Kenward J | | | G.S.W. [Right thigh] & Fracture Right arm |

Some extracts from admission and discharge registers compiled by No.3 Casualty Clearing Station in France which record *Return of Operations Performed with Results* (MH 106/279)

MEDICAL RESEARCH COMMITTEE, STATISTICAL DEPARTMENT…

RETURN OF OPERATIONS

| Corps | Regimental No. | Rank & Name | Nature and cause of the disease which necessitated the operation, and the date of onset of the disease or receipt of the injury. | Nature and anatomical site of operation and anaesthetic used |
|---|---|---|---|---|
| West Riding | 8694 | J. Duffey | Fractured skull. Comminuted [bone splintered in several places] frontal region | Entrance & Exit wounds about 4 |
| West Riding | 8266 | F. Collen | G.S.W. Pelvis & Bladder | … |
| G. Bennall | 7821 | Argyll & Sutherland Highlanders | G.S.W. Scalp Depressed Fracture | Removal [Bullets] Splints |
| S. Carr | 12447 | 2nd King's Own Yorkshire Light Infantry | G.S.W. Skull | Removal [Bullets] Splints |
| 9th King's Own Yorkshire Light Infantry | 9154 | James [Private] | Hernia testis | Returned and stitched |
| 1st Ambulance Hospital | 10472 | Black [Private] | [Fractured] neck humerus Fractured tibia | Swabbed… Carbolic etc. |
| 2nd Cambridge Highlanders | 15692 | W. Beasant | G.S.W. entrance above right eye passing downwards & across front of left ear | Flap raised & drainage |

PERFORMED, WITH RESULTS

| Name of operator and date of operation | Progress of case, noting any secondary complication. | Discharged to duty, invalided, transferred, or died, with date. In fatal cases the cause of death to be noted. | REMARKS |
|---|---|---|---|
| …6/4/15 | Evacuated 0/7/15 | | Removed splinters |
| …7/6/15 | Evacuated 12/4/15 | | Bladder full of blood: fistula through left buttock at wound of exit. |
| …7/4/15 | Evacuated | | D.F. [depressed fracture] parulo-occipital region [of skull] |
| …7/6/15 | Evacuated | | Parietal area [of skull] right side, Partial paralysis left arm |
| …7/5/15 | Evacuated 8/7/14 | | |
| …7/5/15 | Died 8/7/14 | | Gangrene |
| …9/4/15 | | | Both orbital cavities opened: Exophthalmos [bulging or protruding eyeballs] |

## Source Nine: No.36 Casualty Clearing Station (WO 95/344)

| WAR DIARY<br>or<br>INTELLIGENCE SUMMARY | | | | |
|---|---|---|---|---|
| Place | Date | Hour | Summary of Events and Information | Remarks and references to Appendices |
| HEILLY | 1/3/16 | | The unit arrived at HEILLY by road from CORBIE and proceeded to pitch a camp in a field close to HEILLY Railway Station south of the line under instructions received from D.M.S. [Director Medical Services] 3rd Army. The unit was transferred from the administration of the 3rd Army to that of the 4th from 12 noon this day. The equipment & stores of the unit were removed from the place where they were parked near the Railway Station and brought to the Camp. The ground of the Camp is 180 X 75 yards. The ground is clay and very soft. It is bounded on the West by a cultivated patch (rye grass) and on the East by ploughed land. North is the railway line & South the main CORBIE-MERRICOURT ROAD. | |
| HEILLY | 2/3/16 | | The unit was engaged in pitching tents to form a camp & in cutting trenches to drain the camp. There is no water laid on in the camp and the nearest water fit for drinking is distant 1½ miles. | |
| | 3/3/16 | | Application was made to D.M.S. 4th Army for permission to cut a road running West to East at the railway end of the camp. This road is required for two purposes. (1) Evacuation of patients to trains (2) Bringing in stores, coal, Hospital supplies, etc. | |
| | 4/3/16 | | Captain G.M. HODGES ordered to proceed to CORBIE BY D.M.S., 4th Army to supervise the sanitation of that town. Some snow in the morning and a good deal of rain. | |
| | | | … | |
| HEILLY | 22/3/16<br><br>23/3/16<br><br><br><br>24/3/16<br><br><br><br>25/3/16 | | I took over from Lt. Colonel A.A.SEEDS. Went to MERICOURT to select tanks for water storage etc. Roadmaking continued.<br>Lt. Colonel A.A.SEEDS left for MARSEILLES. Roadmaking continued. Went to C.R.E. [Commander Royal Engineers] 13th Corps regarding latrines, cookhouses & water supply.<br>2 inches of snow hindered work. 5 Reinforcements (privates) arrived from Base. 4 Water tanks & a pump down from R.E. [Royal Engineer] dump MERICOURT<br>Roadmaking continued in improved weather. 2 N.C.O.s and 10 men exchanged with 5 C.C.S. [Casualty Clearing Station] and 21 C.C.S. for instruction.<br>Roadmaking continued. Inspection of Gas helmets & toothbrushes of detachment. Service (C. of E) Inspection by D.D.M.S 13th Corps. | |

| | | | | |
|---|---|---|---|---|
| | 26/3/16<br><br>27/3/16<br><br>28/3/16 | | Reported to D.M.S. Fourth Army for instruction. Went to R.E. at RIBEMONT. Roadmaking continued.<br>Lieut. R.F.T. NEWBURY reported for duty.<br>Pitching new marquees-delayed by much rain. Went to C.R.E. 13th Corps re water supply.<br>Roadmaking. Inspection by D.D.M.S. 13th Corps | |
| HEILLY | 18/4/16 | | Heavy rain.<br>Captain G.D. LAING R.A.M.C. returned from leave last night. Visited MERICOURT cemetery & arranged with Rev. W.C. KERR C.7.237 [Ambulance] for burials. Q.M [Quarter Master] (Acting Sgt. Major) A.E.ENDACOTT R.A.M.C. transferred to 6 \Motor ambulance convoy.<br>2 N.C.O.s & 28 men 637th Ambulance, 21 Division arrived for temporary duty. New operating theatre (wooden hut) begun.<br>Seven nursing sisters arrived about 5 pm.<br>Miss M.E. VERNON HARCOURT A.R.R.C. Q.A.I.M.N.S.(R) Sister in charge<br>Sister C.L. CARNEGIE T.F.N.S<br>“ P. TSARNARD T.F.N.S<br>Staff Nurse M.PURVES “<br>“ “ P.M.JONES “<br>“ “ E.M. HENDERSON (C.H.R.)<br>“ “ A. COOPER Q.A.I.M.N.S (C.H.R.)<br>Reported to D.M.S. Fourth Army that accommodation available was 957 & maximum obtainable 1200- but that operation theatre, bathing room, ablution [washing] room, cookhouse, latrines etc. were not yet nearly complete. | |

## Source Eleven: Evacuation Chain (MH 106/2126)

This case shows some of the main medical functions in a complicated chain that processed the casualty from the front line to a hospital at home (MH 106/2126)

| Medical Case Sheet | | | | Army Form I. 1237 |
|---|---|---|---|---|
| No in Admission and Discharge Book | Regimental No. | Rank. | Surname. | Christian Name. |
| | 11956. | Lance corporal. | Allen | Harry |
| Year | Unit | | Age | Service |
| | 6th Leicesters | | 41 | 21 yrs. |
| Station and Date | Disease | Gun Shot Wound Left Knee | | |
| | Wounded in Left Knee by Shrapnel at Groudis Cort at 2-30 pm on 26/9/16. First aid in line, walked to Battalion Field Station about ¼ mile behind the line, wound dressed there about ½ hour and went by motor to 65th Field Dressing Station, dressed, inoculated, there about 4 ½ hours and sent by ambulance train to Rouen, dressed on train and arrived at Number 3 Stationary Hospital Rouen for operations, wound dressed there about, 3 days and sent by ambulance train to [le] Havre not dressed on train and put on Boat same evening remained on boat 2½ days and arrived Southampton 3am 3/10/16 dressed on boat, and sent to Taplow Station by ambulance train not dressed on train, arrived Taplow Station 3-30 arrived Taplow Hospital 5-30 | | | |
| Family History | Mother + Father dead, natural causes<br>Sisters Two<br>Brothers None | | | |
| Personnel | Illnesses of Childhood Enteric Fever in South Africa<br>Glands taken out of through in India, Rheumatism<br>Venereal History No. Married 1904<br>Mayfield Terrace, Mayfield Grove, Meadows Nottingham | | | |
| Present Condition | Small superficial wound over left knee. Open clear and panulating(?) - no bone or nerve involvement | | | |
| Oct 21.10 | Wound healed | | | |

## Source Twelve: Frostbite cases (MH 106/2085) Page one and two

This medical case sheet is representative of many which detail the injury of frostbite, a result of remaining in a water filled trench in freezing conditions. Again this gives details of treatment and insight into conditions for soldiers at the front (MH106/2085)

| Medical Case Sheet | | | Army Form I 1237 | |
|---|---|---|---|---|
| No, in Admission and Discharge Book II 121 | Regimental No. 11693 | Rank Private | Surname Sisson | Christian Name Isaiah |
| Year | Unit | | Age | Service |
| 1914 | 1st Grenadier Guards | | 19½ | 1 yr. 6 mths. |
| Station & Date 3rd A.G.H Dec. 22nd Sheffield | Disease: Frost bite both feet<br><br>Was in the trenches on November 27th. In the trenches 10 days. Was unable to walk out. Was wet through on 20th next night there was frost. Two days later had pain in the feet. Constant sharp tingling pain. The boots were on the tight side, was only wearing one pair of socks. Took boots off at headquarters, ¼ mile away. Feet commenced to swell. Then noticed that right foot was black. Left foot only toes were black. Left foot treated with hot fomentation every ¼ hr coming down in the train. In hospital 4 weeks. Treated with yellow stuff wrung in cloths then with a paste Turpentine & lanolin.<br><br>Present Condition<br><br>Right foot. All toes appear to metacarpal phalangall joint mummified.<br>Area on posterior aspect of heal: ulcerated area on dorsum of the foot.<br>Left foot. All toes and heal affected loss of skin almost complete on dorsum of foot. | | | |

(Sketch to show left and right foot)

Left foot: loose internal flap

Convalescent Home

May 17th: Transferred to Hillsborough Barracks Military Hospital Sheffield

…

Gangrene frost bite

Right foot has now healed soundly.

Left leg

A modified syme? Resulted from amputation with ulceration about post aspect which kept breaking down.

May 28th … amputation was performed at seat of election- Faraboeuf

…

June 8th Amputation of seat of election has now healed

June 10th Convalescent Hospital

July 15th Medical Board B179. Unfit.

Furlough pending discharge

Discharged invalid

---

# Source Twelve: Frostbite cases (MH 106/2085) Page four

This medical case sheet is representative of many which detail the injury of frostbite, a result of remaining in a water filled trench in freezing conditions. Again this gives details of treatment and insight into conditions for soldiers at the front (MH106/2085)

| Medical Case Sheet | | | Army Form I 1237 | |
|---|---|---|---|---|
| No, in Admission and Discharge Book 2754 | Regimental<br><br>No. 10168 | Rank<br><br>Private | Surname<br><br>Kirkshaw | Christian Name<br>Frank |
| Year | Unit | | Age | Service |
| 1915 | 3rd Royal Fusiliers | | 21 | 4 months |
| Station & Date<br>3rd N.G. Sheffield<br>March 20th<br><br><br>

## Source Twelve: Frostbite cases (MH 106/2085) Page six

This medical case sheet is representative of many which detail the injury of frostbite, a result of remaining in a water filled trench in freezing conditions. Again this gives details of treatment and insight into conditions for soldiers at the front. (MH106/2085)

| Medical Case Sheet | | | Army Form I 1237 | |
|---|---|---|---|---|
| No, in Admission and Discharge Book 3138 | Regimental<br><br>No. 8199 | Rank<br><br>Private | Surname<br><br>Allen | Christian Name<br>Benjamin |
| Year | Unit | | Age | Service |
| 1915 | 1st Norfolk Reg. | | 39 yrs | 17 yrs |
| Station & Date<br>3rd N.G.H<br>Sheffield<br>2/5/15<br><br><br><br><br><br>6/5/15<br>11/5/15<br><br><br>May 28 | <u>Disease: Frost bite of toes. Septic Paronychia of finger</u><br><br>Patient has been in 6 hospitals during the last 7 weeks with frostbite of toes. That has practically disappeared but patient has septic paraonychia of Right ring finger as result of a cut from a beef-tin. There is some swelling of the nail fold and purulent discharge from the nail-bed. Nail is not loose. J. Clark<br><br>Scaly seborrhoic condition of chest.<br>Well. Seborrhoea almost well. J. Clark Capt.<br><br>Conv [convalescent] Home. Ackworth<br>Furlo [furlough-leave] | | | |

## Source Thirteen: 'Trench foot' treatment (WO 95/2399)

Extract from a war diary of 75th Field Ambulance which gives a sense of the process of evacuating and treating the sick and wounded at Armentieres 1915 (WO 95/2399)

WAR DIARY 75th Field Ambulance
or
INTELLIGENCE SUMMARY

| Place | Date | Hour | Summary of Events and Information | Remarks & references to appendices |
|---|---|---|---|---|
| ARMENTIERES | 6/11/15 | 7pm | 23 cases admitted to Hospital; 17 cases evacuated & discharged to duty. 11 cases of trench feet have been admitted from 13th Cheshire Regt. The trenches were very wet & the men had been standing & working in water, none of the men had used the anti-frostbite grease before going into the trenches, but they had dry socks to change. None of the cases were severe, the feet were red & congested & as a rule swollen with tingling sensation or loss of sensation in the toes. The all recovered after little more than 24 hours rest & treatment, which mainly consisted of baths & warm dressings. | |
| | 7th | | 17 cases admitted to Hospital; 10 cases evacuated & discharged to duty. | |
| | 8th | | 36 " " " " (7 wounded); 42 cases evacuated & discharged to duty. Cases remaining in Hospital 8 Officers, 74 N.C.O.s & men. | |
| | 9th | | The position of the Regimental Aid Posts which are evacuated by the 75th Field Ambulance are now as follows- Map 36, C.9, d 9.5 | |
| | 10th | | " " C.3. d 4.6<br>28 U.27; b<br>The area to the North is evacuated by the 76th Field Ambulance & to the South by the 63rd Field Ambulance. | |
| | | | 24 cases admitted to Hospital (3 wounded); 29 cases evacuated or discharged to duty. | |
| | | | 8 cases admitted to hospital (2 wounded); 13 discharged to duty or evacuated ... | |

## Source Fourteen: 'Trench foot' (MH 106/2085)

This medical case sheet is representative of many which record cases of trench foot, a result of remaining in water filled trenches. It provides details of treatment and insight into conditions at the front (MH 106/2085)

| Medical Case Sheet | | | Army Form I 1237 | |
|---|---|---|---|---|
| No, in Admission and Discharge Book 6707 | Regimental No. 5054 | Rank Private | Surname Gardiner | Christian Name William |
| Year | Unit | | Age | Service |
| 1915 | 7th London | | 26 | 6 months |
| Station & Date<br>3rd N.G.H<br>Sheffield<br>Nov.24th | <u>Disease: Trench Feet</u><br><br>Began 3 weeks in the reserve line trench just behind Loos. Had been standing in water for several days. Feet were very swollen, and he lost sensation- skin unbroken. He also complained of chilliness-could not get warm even in hospital-treated in No.2 Canadian Hospital Le Freporte- Treatment: Boracic Powder daily.<br><br><u>Present Condition</u><br><br>He can walk a little, sensation is returning-throbbing pain. Anaesthesia [loss of sensation] in his left foot. Treatment- Is being rubbed daily with Turpentine and olive oil. | | | |
| Nov. 29th | Improvement satisfactory. Transferred to convalescent home. | | | |
| 13.12.15 | <u>Furlough (On leave)</u> | | | |

## Source Fifteen: Pension for 'Trench foot' (PIN 26/11809)

Pension records are another source for enquiring into the types of injury experienced by soldiers fighting in trenches on the Western Front. The document also details the amount of pension payable to this man at the end of the war. (PIN 26/11809)

| | |
|---|---|
| **11/M/71131** | |
| Rank Private | Regimental Number 29560 |
| Name Puddifoot, William Alfred | |
| Regiment; Bedfords [Bedfordshire Regiment] Depot<br>The Bedfordshire Training Depot was opened at Ampthill Park in September 1914 for training new recruits but from October 1916 it became the Bedfordshire Command Depot and turned its attention to treating wounded soldiers.] | |
| Date of Discharge 26.1.18 | |
| Age of commencement of Pension 32 | |
| Trade Paper Cutter | |
| Address 172 Chester Road, Watford, Herts | BOARD'S DECISION:<br>27 [shillings] & 6 [pence] for 26 weeks<br>Children's allowance 5 [shillings] for 1 |
| Character Very good Badges | Names of children<br>… |
| Medals | |
| Place of Birth | |
| … | <u>Foreign Service</u><br>France 6 months- 4.10.16-1.4.17 |
| Date of enlistment 1.12.15 | |
| Date of Mobilization 31.5.16 | |

<u>Cause of Discharge</u> Physically unfit, Trench Foot TOTAL DISABLEMENT

<u>Report of Medical Board (dated 5.1.18)</u>

Originated 13.3.17 Arras
Result of active service-Trench foot "2", not permanent, 6 months. Presents 100% (disability) at present.
Should attend an orthopaedic centre every month for advice and treatment…

## Source Sixteen: Poor diet (MH 106/2100)

This medical case sheet is interesting because there is a suggestion that the skin disease described here is linked to poor diet, or lack of vegetables. There is evidence in this collection that some doctors at the front carried out investigations into the existence of scurvy amongst the men (MH 106/2100)

| Medical Case Sheet | | | Army Form I 1237 | |
|---|---|---|---|---|
| No, in Admission and Discharge Book 775 | Regimental<br><br>No. 10972 | Rank<br><br>Rifleman | Surname<br><br>Gambier | Christian Name<br>Frederick |
| Year | Unit | | Age | Service |
| 1915 | 8th Rifle Brigade | | 21 | -6 |
| Station & Date<br>No.12 Canadian Stationary Hospital Boulogne<br>8/12/15<br><br><br><br><br><br><br><br><br><br><br>13/12/15 | <u>Disease: Psorsias</u><br><br>Admitted here Dec. 8th/15, covered with a rash. Whole body is covered. Red patches with white scale on surface about half as large as a pea are covering the whole body except the face which has a few individual patches. This came on as itchy spots about three weeks ago which kept increasing in number and size.<br><br>He says he has had an itchy skin disease practically all his life but it never amounted to much. His mother used to be affected the same.<br><br>He has been in the trenches a month and says he has had very little vegetables since joining up. No treatment given him before coming here.<br><br>Transferred to England-improved<br>… | | | |

## Source Seventeen: Report on Scurvy (WO95/1703) Page one

Report to the A.D.M.S. [Assistant Director of Medical Services] 8th Division from Officer Commanding of 24th Field Ambulance concerning research into the increased number of cases of scurvy, 13th August 1915 (WO 95/1703)

---

TO A.D.M.S. 8th Division

Having noticed that a large proportion of the patients in the Divisional Rest Station had anaemia [low iron], pyorrhoea [inflamed gums with the discharge of pus and loosening of the teeth] and rheumatism, Major Sayres, Lieut. Lloyd and myself have examined the twelve cases tabulated on the sheet appended.

The symptoms- anaemia, affection of the gums, loose teeth, muscular pains, rashes, and night blindness form the chief symptoms of scurvy, it seems to us that their occurrence, not all of them in the same patient, but some symptoms in all cases investigated suggests that a very mild degree of this disease does exist in these cases, and that it may explain the frequent occurrence of myalgic pains, affections of the gums, and anaemia in our patients.

It is to be noted that the most constant symptom was night blindness, which occurred in 10 out of 12 cases. It was not complained of by the patients, was of slight degree, but definite.

As a control, seven patients were examined for this symptom who were suffering from slight injury or disease other than that being investigated, the variations were slight and within normal limits. Details of these are given with this report. At the present time the Infantry are in the trenches from 6-4 days, and in billets for the same time usually. During the trench period they have no fresh meat or vegetables; tinned meat, biscuit & bread, jam, cheese, etc. are issued, the men often eating but part of the meat & supplementing the bread by local purchase.

If scurvy is to be regarded as due to the absence of vitamins, it is fair to suppose that a great diminution in these for periods of several days will, in some cases, have an effect on health. Although a ferment acts outs all proportion to its bulk, the amount present does have a quantitative effect on the amount of the reaction which takes place as the result of its presence in the tissues; it is in this way that I think that the cases have arisen. It is quite in accordance with experience in slight cases of other diseases that all the symptoms should not be present in any one case, as has happened in this series.

12/8/5 R. Pickard, Lt. Colonel, O/C [Officer Commanding] 24th Field Ambulance

## Source Eighteen: Dental treatment & sanitation plans (WO95/1703)

Extracts from a war diary about dental treatment and sanitation plans by the 24th Ambulance plans at Doulieu, July 1915. (WO 95/1703)

| WAR DIARY<br>or<br>INTELLIGENCE SUMMARY | | | | |
|---|---|---|---|---|
| Place | Date | Hour | Summary of Events and Information | Remarks & references to appendices |
| DOULIEU | July 6th<br>Cont.'d | | Sullage [waste water] water pits (covered in), urine pits (covered in) provided for patients & personnel. Latrines provided with biscuits tins in biscuit boxes so that urine and faeces are separated, the latter being incinerated [burnt] with sawdust in an incinerator.<br><u>Divisional Rest Station</u> – A large proportion of these patients have rheumatism, many of these have pyorrhoea [inflamed gums with the discharge of pus and loosening of the teeth]. An attempt to treat these cases as dental sepsis is arranged, treatment:-<br>i. Teeth extracted if necessary-tartar removed [a hard deposit that forms on the teeth and can cause decay]<br>ii. These are divided into 3 groups taken at hazard & the pockets in the gums syringed as followed:-<br>Group a) Solution Hydrogen peroxide<br>" b) " Salt 3i : Sodium Bicarbonate 3i: loakr o1<br>" c) " 5% common salt (hypertonic)<br>R. Pickard Lt Colonel | [Diagrams showing]<br><u>Latrine boxes</u><br>Biscuit box opened, inverted, middle 2/4 of bottom cut out becomes a seat over the two biscuit tins, the middle 2/4 being the cover which is replaced after use:<br><u>Latrine seat, cover, tins in position, position on seat</u> |

## Source Nineteen: Inoculation for enteric (CAB 41/36)

Extract from cabinet conclusions recording a note from Prime Minister Asquith to the King (CAB41/35)

10 Downing Street

Whitehall S.W.1

Mr Asquith, with his humble duty to your Majesty, has the honour to report that the Cabinet met this morning.

Lord Kitchener asked approval of a Bill to make inoculation against enteric compulsory in the case of new recruits. In view of the acute controversy which the introduction of such a measure would arise, the Cabinet deemed it wiser to wait for a while [for] the results of the appeal recently issued by the leading doctors and countersigned by Lord Kitchener.

It was resolved with a good deal of reluctance.

## Source Twenty: Example of a Medical Field Card (MH106/2139)

This is an example of an Army Field Medical Card, Army Form W.3118, and these often do not survive with other service records. It was completed when a man was admitted as a casualty to a Field Ambulance and would have accompanied him on his journey to the casualty clearing station and then base hospital if he survived. (MH106/2139)

---

[Front of card-right side]

Army Form W.3118

FIELD MEDICAL CARD

No. --------- Rank LIEUT

Name WARDEN A.J.

Unit 11th LEICESTERS

---

Battle Casualty Accidentally Wounded Sick

(Strike out description which does not apply)

No. of F.A. [Field Ambulance] 17

Date of admission 17/5/18

F.A. diagnosis Shell gas (W) Yellow X

… R.A.M.C.

Additional notes to be written on back of card.

---

C.C.S. diagnosis (if altered from above)

_____Base Hospital diagnosis (alterations or additions)

[Left side of card]

A.T. Serum [anti-tetanus]
Dose and date 1st
2nd

FIELD AMBULANCE NOTES

Morphia
Dose and time

Date of wound or onset of illness 16/5/18

Religion C .of E. [Church of England]

Reverse of field card

Date of entry and medical unit admitting must be recorded immediately on admission. Brief clinical notes to be added later and signed by M.O.[Medical Officer]

Stamp:
2nd Canadian
17th May 1918
Casualty Clearing Station

No. of C.C.S.

Date of entry

Majority of symptoms are those rather of the new arsene compound [used in the gas] rather than mustard gas [sulfur based gas]

Base 4

J. G. Wood

…

[Left side of card] [Stamp]

No. of Hospital No.5 B.R.C. [British Red Cross] Hospital, no 1913

Date of entry 18.5.18

Eyes [very] painful, impossible to open.

22/5/18

[Very] much improved, complains of pain left axillary region [armpit]

…

## Source Twenty One: Gunshot wound skull (MH 106/2109)

Medical case sheet for a soldier who experienced a gunshot wound to the skull describing his treatment at a clearing station before being evacuated to England (MH 106/2109).

| Medical Case Sheet | | | Army Form I 1237 | |
|---|---|---|---|---|
| No, in Admission and Discharge Book 6.17 | Regimental<br><br>No. 2648 | Rank<br><br>Private | Surname<br><br>Walker | Christian Name<br>J |
| Year<br>1915 | Unit<br>9th Company D.L.I<br>[Durham Light Infantry] | | Age<br>19 | Service<br>10 months<br>3 months<br>B.E.F |
| Station & Date<br>Northumberland War Hospital Gosforth, Newcastle-on-Tyne<br>26.7.15<br><br><br><br><br><br><br>17/7/15 | Disease: Gunshot wound of the skull<br>The patient says he received the wound on the 9thJuly 1917 at Camill about 10.30 am. He "lost his senses" for 15 minutes. He walked down to the dressing station (2 miles) & he lay till 1 am till moved by the motor ambulance & he was taken to Baillieu the clearing station. He has been trephined [circular disks of bone removed from the skull using small surgical saw]. He was admitted there "with paralysis of right arm & in a dazed apathetic condition". He was operated upon. Operation "An area of almost the size of 2/6 piece [half a crown] was removed from left rolandic area wound. Cleaned & drained. Wound was very septic before the operation"<br><br>Pt. [patient] has got rapidly well. Wound seems to be healing by first intention. "Paralysis of the arm is now absent" – extract from report sent with patient<br>… | | | |

## Source Twenty Two: Tetanus risk from bullets & shrapnel (MH 106/2104)

This is one of two medical case sheets which reveals the problem of infection associated with shrapnel and gunshot wounds leading to possible tetanus and lock jaw (MH106/2104)

| Medical Case Sheet | | | | Army Form 1.1237 |
|---|---|---|---|---|
| No, in Admission and Discharge Book E.44 | Regimental<br><br>No. 8365 | Rank<br><br>Private | Surname<br><br>Slater | Christian Name<br>J.E. |
| Year | Unit | | Age | Service |
| 1914 | 1st South Staffs | | 26 | 6 |
| Station & Date<br>Military<br>3rd N G H<br>Sheffield<br>6th Nov.'14<br>(midnight)<br><br><br><br><br><br><br><br>Nov. 7 | <u>Disease Shrapnel wounds, Buttock, head and shoulder. Tetanus</u><br><br>This man arrived at midnight Nov. 6 with extensive shrapnel wounds of buttock & back- surfaces were covered with foul stinking pus as he shewed signs of trismus [lock jaw], anti-tetanic serum was administered.<br><br>Wounds sprayed with peroxide of Hydrogen in large quantities & Hypertonic saline fomentations applied. Appearance of patient: ashen (very pale), pulse rapid. Spasms soon appeared & large doses of chloral hydrate fxx [sedative] every 2 hrs for 3 doses.<br>Patient died 2pm.<br>Special report sent up to Surg.<br>General Sir David Bruce Ams.<br><br><u>Died</u><br><u>No prophylactic dose mentioned</u><br><br>A.M. Connell<br>Lt. Colonel, R.A.M.C. (T) O.C 3rd Northern General Hospital | | | |

## Source Twenty Two: Tetanus risk from bullets & shrapnel (MH 106/2104)

This is one of two medical case sheets which reveals the problem of infection associated with shrapnel and gunshot wounds leading to possible tetanus and lock jaw. This example also shows the journey taken by a wounded soldier as part of his treatment. (MH106/2104)

| Medical Case Sheet | | | | Army Form 1.1237 |
|---|---|---|---|---|
| No, in Admission and Discharge Book 949 | Regimental<br><br>No. 10531 | Rank<br><br>1st Lieutenant | Surname<br><br>Kelly | Christian Name<br>Lennard |
| Year | Unit | | Age | Service |
| 1915 | 2nd Scottish Rifles | | 22 | 4 yrs.4months |
| Station & Date<br>Military<br>3rd N G H<br>Sheffield<br>April 15th<br><br><br><br><br><br><br><br>Nov. 7 | Disease Gunshot wound of neck & Right arm, Tetanus<br>Injury to Brachial Plexus<br><br>Wounded at Nerve Chapelle on 15th March. Bullet struck side of neck on [sternocleidomastoid] injuring 5th & 6th & cervical [spine] process on right side. Loss of all movement of right arm. Was in the trenches at the time. Another bullet struck right forearm extension surface. Both “bullets” remained in- went to powder. Anti-tetanus injection at Merville. Treated by ambulance men in trenches. Then to A.D.S. [advanced dressing station] at Neuve Chapelle. Went by ambulance to Merville the next day. Dressed there again. Then sent to No. 3 Stationary [Hospital] Rouen the same day. Was there for 3 weeks & 4 days. Had operation on or about March 26th. Opened neck and found nothing except abscess. Left a small drain in it. Right arm was X Ray.T [Bullet] (powdered) was too small to take out-not opened.<br>Sent onto Hospital ship on April 3rd and remained until following evening. Then removed to No.2.General Le Havre [Hospital] where was given 3000 units of serum in 40 ccs normal saline. 20 ccs spinal fluid previously withdrawn. 3000 units in 1 p1 normal saline given intravenously [by drip into vein], & 3000 into buttock.<br><br>Buttock afterward very swollen & sore to just above the knee. Right arm infection just above the elbow … no swelling.<br><br>He was in No 2. General for 8 days. Wounds treated with dry dressings, healing well.<br><br>Crossed from Havre on April 14th, 15th night. On *SS Oxfordshire* [ship] came with the 21st Convoy to 3rd N.G [Hospital] Sheffield. Arrived 6.30. p.m. April 15th | | | |

## Source Twenty Three: Gunshot wounds to chest & statistics (MH 106/2115)

An example of an attempt to compile statistics for gunshot wounds at the First Eastern General Hospital in May 1916, and two cases of gunshot wounds to the chest (MH 106/2115)

FIRST EASTERN GENERAL HOSPITAL

CAMBRIDGE

50 Cases of Gunshot Wound of Chest

Injury to Lung 5

Haemo-thorax [blood accumulates in the pleural cavity. This excess fluid can interfere with normal breathing by limiting the expansion of the lungs] 35

Empyema [pockets of pus collected inside a body cavity. They can form if a bacterial infection is left untreated] 10

Died. 1 from suffocation Haemoptysis [coughing blood] and septic Empyema

In 8 cases blood or serous fluid had been drawn off by aspiration in the Hospital in France soon after the injury. Five of these subsequently developed empyema.

In the subsequent treatment of Haemo-thorax [blood collecting between chest wall and your lungs] cases respiratory movements and walking exercises were prescribed with advantage in hastening the expansion of the lung.

In the more severe cases of Haemo-thorax the expansion of the contracted side was often delayed. The return of the Respiratory murmur usually preceded any marked change in the percussion note; and the dullness to percussion persisted for months, even when the patient has practically recovered.

Laurence Humphrey

Temp. Lt. Col. R.A.M. C. T

May 1 1916

## Source Twenty Three: Gunshot wounds to chest & statistics (MH 106/2115)

An example of an attempt to compile statistics for gunshot wounds at the First Eastern General Hospital in May 1916, and two cases of gunshot wounds to the chest. (MH 106/2115)

**GUNSHOT WOUNDS OF CHEST**

Name of Physician or Surgeon now in charge of patient  Captain Fletcher & Capt. Shardlow

Name of Hospital he is now in  2nd East General

Patient's Name  Hollis J.E.

Regimental No. 24744  Corps  25 Fortress Royal Engineers  Age 24

Date when wound was received 25.4.15  Admission to present Hospital: 15.5.15

History up to time of admission

Gassed & wounded at same time, near Le Bassée (he says he was paralysed for several hours) removed (soon) to Dressing Station where he was detained for a fortnight: thence to Boulogne for 1 week. Haemoptysis [coughing up of blood] profuse while at Dressing Station: also offensive purulent sputum [pus & mucus]

Position of entrance of wound  Left 9th space 2 inches from spine (of vertebra)

Physical signs in chest on admission  not noted

[Two diagram of chest to show wound sites for entrance and exit of bullet(s)]

<u>Right Lung</u>

….

No obvious displacement of heart

Physical signs of free fluid in pleura below level of 6th rib.

Diagnosis (e.g. pneumothorax, haemothorax [blood collecting between chest wall and your lungs]

Bullet wound Right lung. Right sided haemothorax

Results of X-ray examination - negative "of chest & abdomen reveals no foreign body"

Progress of case (please state temperature and if possible send chart

Gradual improvement: small wound healed. On admission had much offensive purulent sputum: now ceased. Still (June 14.15) gets pain & small tenderness over liver in front. 24th June 15, level of fluid lower (from level of 6th rib to level of 8th rib). Temperature normal for the first fortnight, has since 12 June, risen daily & rising to 100 degrees.  Moderate dyspnoea [shortness of breath].

July 8th.15 Level of fluid lower. General condition good.

Description of any operation performed –

Results of any Bacteriological examination-

Treatment Expectorant [medicine help expel mucus from the lungs when coughing]

State of patient on discharge- General and real condition good. (Bullet presumably still in him)

When fit for (a) Home service say 4 weeks (b)foreign service

Address to which patient was discharged School Hill House, Lewes Sussex (Convalescent Hospital)

In case of death give (a) cause of death

Post-mortem examination (if any)

Signature of Medical Officer making this report….

## Source Twenty Three: Gunshot wounds to chest & statistics (MH 106/2115)

An example of an attempt to compile statistics for gunshot wounds at the First Eastern General Hospital in May 1916, and two cases of gunshot wounds to the chest. (MH 106/2115)

**GUNSHOT WOUNDS OF CHEST**

Name of Physician or Surgeon now in charge of patient Captain Morgan

Name of Hospital he is now in 2nd Eastern General

Patient's Name Hamil E.

Regimental No. 2535 Corps 5th Northumberland Fusiliers Age 22

Date when wound was received 14.6.15 Admission to present Hospital: 18.6.15

History up to time of admission

Wounded near Ypres, bullet, lay out (in dugout) 16 hours, ambulance to Red Cross van, thence to small hospital in Belgium, thence to a larger hospital in Belgium, thence to Australian hospital in Boulogne, thence to 2nd Eastern General [hospital]. Slight haemoptysis [coughing up of blood] abroad (after wound).

Position of entrance of wound

Mid axillary line on horizon. Level E (entrance] left nipple

Position of exit of wound (if any) 1 inch 4r [4th rib) to left of left scapula… no abnormal signs

Physical signs in chest on admission

[Two diagram of chest to show wound sites for entrance and exit of bullet(s)]

The entrance wound is considerably larger than the exit wound (if patient statement is accurate)

Diagnosis (e.g. pneumothorax, haemothorax [blood collecting between chest wall and your lungs]

Bullet wound Left lung

Results of X-ray examination none made

Progress of case (please state temperature and if possible send chart

Slight haemoptysis (scanty, sputum slightly tinged [with blood]). Some pain on coughing & on deep inspiration. T.P.R. [temperature, pulse, respiration]

Description of any operation performed

Results of any Bacteriological examination

Treatment Strapping

State of patient on discharge- about 25th June ’15, Convalescent. This patient will probably be perfectly fit in the course of 3 or 4 weeks.

When fit for (a) Home service (b) foreign service: say 4 weeks.

Address to which patient was discharged The Cottage Hospital. Haywards Heath Sussex (to convalesce)

In case of death give (a) cause of death

Post-mortem examination (if any)

Signature of Medical Officer making this report….

## Source Twenty Four: Death from tetanus (MH 106/2162)

This is a notification about a patient at St John Ambulance Brigade Hospital No. I3. This was a Base Hospital which received patients from the Casualty Clearing Stations situated a few miles behind the front line. It provided treatment, surgical support or convalescence to patients before they were evacuated to hospitals in the UK or returned to their units. This source shows that wound infection from bullets or shrapnel could lead to tetanus. A person usually becomes infected with tetanus [also called lock jaw] when dirt enters a deep puncture wound or cut. The record suggests that as a precaution men with such wounds were injected against tetanus, but this did not happen at the CCS (MH 106/2162)

| Regiment Number | Rank | Name | Unit | Admitted from (Number of Army) | Date of Admission | Disease Diagnosed | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | At front | Elsewhere | At Reporting Base | |
| 11044 | Private | Griffiths A.H. | 3 Leicesters attached 9 Essex | Army? No. 3 Casualty Clearing Station | 13-8-16 | Multiple shell wounds. Fractured left humerus. | -- | Tetanus | First symptoms of Tetanus appeared 21-8-16. No record of Anti Tetanus Serum having been given at Casualty Clearing Station. 1500 Units given at this hospital on 21-8-16. Patient died 23-8-16. |

Etaples.

23-8-16.

Captain and Registrar.

for O.C., St. John Ambulance Brigade Hospital

[Stamp: Registrar St John Ambulance Brigade Hospital No. I3 Date 9/16]

## Source Twenty Five: Gunshot wound to spine (MH106/2113)

This medical case sheet records a serious gunshot and shrapnel wound to the back and the death of the patient (MH106/2113)

Medical Case Sheet

| No. in Admission and Discharge book | Regimental No. | Rank | Surname | Christian Name |
|---|---|---|---|---|
| 809.14 | 334 | Sergeant | Taylor | Alexander |
| Year | Unit | | Age | Service |
| | 1/6 Seaforth | | 21 | 6 |

| Station and Date | Disease Gun Shot Wound of Back [blue pencil:] shrapnel. Fracture of thoracic vertebrae. |
|---|---|
| Welsh hospital Netley<br>24/6/15 | [blue pencil] complete<br>Paraplegia pneumonia<br>Severe injury to spinal cord<br><br>[Illustration of injury]<br>Gunshot wound sinus leading upwards<br>Small incision into intercostal space (made in France)<br><br>Wounded 6.30pm June 15/15 by shrapnel of Festubert<br>Was in the fire trench + firing at enemy who were 75 yards in front. Standing position firing over parapet.<br>First aid 6 hours later by Regimental Medical Officer. Carried on stretcher about 1 mile. Left regimental dressing station same night + taken by field ambulance to Lacon where wound was dressed. Left same night + taken to Number 1 Northern General Hospital at a village near Rouen. Left June 17 + taken on board Hospital Ship "Oxfordshire". Remained on board all day but was taken off in the evening to Number 2 General Hospital Havre<br>Shipped to England by Hospital Ship "Asturias" + arrived Southampton June 24/15. Admitted Welsh Hospital Netley 24/6/15 [Blue pencil addition:] 27.6.15 Died<br>Operation<br>Incision in 8th intercostal space. Back. Right side healed. Made somewhere in France.<br>Anti-tetanic Serum June 18/15 at Havre<br>Entrance wound<br>Level of 1st dorsal vertebra 4" to left of middle line.<br>Slightly septic ¾" Diameter. Sinus running towards middle line<br>Missile track<br>Fracture of Laminae of 1/2+3 dorsal vertebrae<br>Tissue Damage<br>Injury to Spinal Cord. Complete paraplegia [complete paralysis of the lower half of the body]<br>All reflexes lost. Incontinence of urine + faeces<br>Anaesthesia up to middle line. |

| | |
|---|---|
| | Lungs signs of Pneumonia of Right Lower lobe. Large bedsore over sacrum.<br>June 26/15 Patient has been vomiting continuously<br>Urine full of puss + blood<br><br>June 27/15 Patient died<br><br>(Signed) J. Garfield Evans.<br>Lieutenant<br>Certified true copy. |

## Source Twenty Six: Treatment for 'hysteria' (MH 106/2145)

An Army form describing treatment for 'hysteria'. Sometimes this term was used alongside shell shock or neurasthenia, or physical and mental exhaustion usually with accompanying symptoms (such as headache and irritability), often associated with depression or emotional stress (MH 106/2145)

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For Expeditionary Force cases only. Army Form W.3243A

STAMP: SEALE-HAYNE MILITARY HOSPITAL NEWTON ABBOT DEVON 14 DEC.18

State from which Force Discharged Serial No. in A & D. Book [Admission & Discharge]
T18

Regt. (state if T.F. [Territorial Force] Royal Field Artillery

Troop, Battery or Company 57 Reserves Regimental Number 48464

Rank Gunner

Name Piper A.

Age 30 Total Service [4 years, 2 months]

(a) Date of Arrival at Hospital as an admission
(b) AS a transfer (state where from) 13.12.18 Military Hospital Fargo [Larkhill, Sailsbury Plain, Wiltshire]

Date of discharge to duty 15.1.19

Date of discharge by change of disease

Date of discharge as an invalid

Date of death

Date of transfer (state where to) (Name of Hospital to be given)

No. of days under treatment 19 months. 36 days.

---

To be filled in by the Medical Officer in charge of the case in accordance with para.14.A.C.I. 462 0f 1917

Date of onset of disease or injury March /17.

Disease or injury Hysteria

Operations

Result of operation

Brief notes on case with complications in order of occurrence-:

Blown up at Salonica March/17: afterwards stammered badly. Treated by hypnosis in [hospital] in Malta, only slightly improved. On [admission] here stammer very bad, almost speechless. Cured in 20 minutes by psychotherapy. Fit to return to civil employment.

…

## Source Twenty Seven: Trench Fever (MH 106/2162)

This medical case sheet describes a case of ‘trench fever’ (MH 106/2162)

| Medical Case Sheet | | | | Army Form I. 1237. |
|---|---|---|---|---|
| No in Admission and Discharge Book 75060 | Regimental No. | Rank. | Surname. | Christian Name. |
| | 11799. | Private | Clarke | Thomas |
| Year 1916 | Unit | | Age | Service |
| | 7th Leicesters | | 30 | 1 year 10 months |
| | | Slight ~~Severe~~ ~~Dangerous~~ | | |
| Station and Date | Disease | Trench Fever | | |
| The Lord Derby War Hospital Warrington | Next of Kin | | | |
| | Mother [address] | Inoculation Against Enteric ~~TV 1~~ TV 2 ~~TV Nil~~<br>Date April 1916<br>Cross out that which does not apply | | |
| | Previous Health – Very Good<br>Field Health – Good<br>Present Illness – about the middle of May he began to suffer from pains in head and sore throat. He was taken to the F.A. [Field Ambulance] where he improved greatly and after some days was sent back to duty. After 2 days in the trenches he began to suffer from pains in the legs spreading up to the hips and across the back. In addition he had severe abdominal pains. His appetite was poor and his bowels constipated. At the base he improved greatly.<br>Present condition – he feels very comfortable apart from slight pains in legs at night. Appetite very good. Bowels fairly regular. Urine normal.<br>Circulation + Respiratory System – Negative | | | |
| 5/7/16 | --- A H (2) G Nash Major R Army Medical Corps | | | |
| | Recommended<br>Discharged<br>On July 25/16<br>To Duty _ Light Duty B | | | |

## Source Twenty Eight: RAMC medical training (WO 95/4117)

Extracts from the War Diary of the 44th Field Ambulance [Royal Army Medical Corps] a mobile army medical unit operating in France in 1916. Shown here is an appendix from the diary relating to army medical training and a diary extract. (WO 95/4117).

| Times | Wednesday<br>13th February | Thursday<br>14th February | Friday<br>15th February | Saturday<br>16th February |
|---|---|---|---|---|
| 9.-9.30 am | Physical Drill | Physical Drill | Physical Drill | --- |
| | 10-10.30 am<br>Address & practical Demonstration.<br>"Arrest of Haemorrhage"<br>[stopping bleeding] | Practical demonstration<br>"First Aid" | Practical demonstration<br>Δ Bandage<br>[cotton triage bandage, triangle shaped] | Practical demonstration<br>Δ Bandage<br>[cotton triage bandage, triangle shaped] |
| 10.0 am | Commandant 10.30 11.0 am<br>Practical demonstration<br>"Rechauffement"<br>[treatment for frostbite]<br>Major. O' Hagan. C.A.M.C | Capt. Cowell<br>R.A.M.C. | Capt. Cowell<br>R.A.M.C. | Capt. Cowell<br>R.A.M.C. |
| 11.0 am | Practical Demonstration:<br>"Sanitary Appliances"<br>Capt. Jacobs R.A.M.C | Lecture: "Prevention of Disease"<br>Captain Moss-Blundell<br>R.A.M.C. | Lecture: "Conservancy in the field"<br>Capt. Jacobs R.A.M.C | Competition.<br>"Thomas' Splint"<br>Address<br>Inspection<br>Parade<br>March Past |
| Noon | Lecture: "Care of feet & prevention of Trench Foot"<br>Capt. Price R.A.M.C | Practical Demonstration:<br>"Care of Water Carts"<br>Capt. Jacobs R.A.M.C | Lecture and demonstration:<br>"First Aid"<br>Capt. Cowell R.A.M.C | |
| 3.0 pm to 3.30 pm | Practical demonstration.<br>"Thomas' Splint"<br>Capt. Cowell R.A.M.C | Practical demonstration.<br>"Thomas' Splint"<br>Capt. Cowell R.A.M.C | Practical demonstration.<br>"Thomas' Splint"<br>Capt. Cowell R.A.M.C | Return to nits |
| 3.30 pm to 4.30 pm | Construction of Sanitary Appliances [latrines, showers, sinks etc.]<br>(Sanitary Orderlies only) | | | |

R.A.M.C. SCHOOL OF INSTRUCTION WAR DIARY
or
INTELLIGENCE SUMMARY

| Place | Date | Hour | Summary of Events and Information | Remarks & references to appendices |
|---|---|---|---|---|
| ETAPLES | Aug 24th | AM | Lectures given by Capt. Pirrie on Thomas Splint and by Lt. Colonel Tyrrell on the packing of the equipment of a field section of a …section Field Ambulance | [Diagrams showing] Latrine boxes Biscuit box opened, inverted, middle 2/4 of bottom cut out becomes a seat over the two biscuit tins, the middle 2/4 being the cover which is replaced after use: Latrine seat, cover, tins in position, position on seat |
| | | PM | Nothing to write, | |
| | 25th | AM | Sunday. Lieutenant & Quarter master J.E. Newton R.A.M.C. reported his arrival | |
| | | PM | Twenty-five Officers reported their arrival without previous official notification having been received. Director of Medical Services visited School for a short inspection & expressed his approval of everything | |
| | | AM | The new arrivals were marched to the Gas centre for the purpose of having gas helmets fitted & tested. On return the following lectures were given:<br><br>11am. Lecture by Commandant. Introductionary remarks and a lecture entitled: “The progress of a wounded man from the frontline to the base”<br><br>12 noon Issue of steel helmets to all newly arrived officers<br>2.pm Work of \|Field Ambulance by Lt Col Tyrrell D.S.O [Distinguished Service Order] .M.C [Medical Corps]<br>3 pm Thomas’ Splint in the forward area | |

## Source Twenty Nine: Treatment with Thomas Splint (MH 106/2124)

This army medical case sheet shows the use of the Thomas splint for a serious gunshot wound and outlines the medical treatment for the injury. The document also provides some insight into the nature of trench warfare. (MH 106/2124)

| Medical Case Sheet | | | Army Form I 1237 | |
|---|---|---|---|---|
| No, in Admission and Discharge Book 2646 | Regimental<br><br>12242 | Rank<br><br>Private | Surname<br><br>Williams | Christian Name<br>Robert |
| Year | Unit | | Age | Service |
| 1915 | 2nd Royal Scots Artillery | | 21 | 4 |
| 3rd National General Hospital, Sheffield<br>March 22nd | Disease: Gunshot wound of leg (Left) Fracture of femur<br>Thigh [comminuted] fracture [3 or more breaks] of femur<br><br>Wounded 6th March at Armentières going to relief in the trenches 8pm sniped from fairly close range. Carried into Hospital at Armentières & the Bailleue- where he had left leg set under anesthetic-then sent to Boulogne for one night. Then crossed over. Bullet entered external aspect of left thigh about the middle, fractured femur lower third, but did not take explosive effect and passed out just above the knee- upper surface. Lost use of leg at once, but no anesthesia, very painful when admitted to Sheffield. Colonel White reset leg on March 12th under anesthetic with extension & weight using modified Thomas Splint.<br><br>Embarked 23/2/15 Disembarked 11/3/15 | | | |
| April 24th | Splints removed yesterday<br>Convalescent Hospital-<br>Re-admitted 3rd Northern [General Hospital]- Ward 18 | | | |
| May 22 | Firmly united. Considerable shortening… | | | |
| May 29 | Furlough | | | |

## Source Thirty: Thomas Splint (AIR 2/136)

Here are some extracts from the instructions for applying the Thomas Splint. They were sent to the Principal Medical Officer for the Royal Air Force at Cranwell Air Academy for training officers and aircrew in August 1921 by the Squadron Leader (Medical Staff for Director of Medical Services) after the war. (AIR 2/136)

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**INSTRUCTIONS FOR THE APPLICATION OF THOMAS'S SPLINT**

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**The Thomas's Outfit consists of-:**

Stretcher.
Blankets, 3.
Thomas's Splint (largest size).
Reversible Footpiece (Sinclair's).
Suspension Bar.
Flannel Bandages (6 yards), 3.
Triangular Bandages, 4
Dressings
Safety Pins.
Gooch Splinting (10" X 6" & 8" X 6")

**Personnel required:-**

Operator 1. No.1 Assistant No.2. Assistant (if available)

When in use the splint is kept hung up. The five slings of flannel bandage are rolled round the inner bar of the splint, the leather is kept soft by saddle soap, and the iron bars are smeared with vaseline.

**Indications for Application**

1. For all fractures of the thigh bone, except where there is an extensive wound in the upper part of thigh or buttock, which would interfere with the fitting of the ring.
2. In severe fractures about the knee-joint or upper part of the tibia.
3. In certain cases of extensive wounds of the fleshy part of thigh.

… [Detailed drill instructions were provided for the application of the splint]

**APPLICATION OF THOMAS'S SPLINT** [Labelled diagram with key]

I. Warming
II. Extension
III. Modified Clove-Hitch over Boot
IV. Splint
V. Fixation of leg
VI. Dressing of Wound of Thigh
VII. Gooch Splints and Triangular Bandages
VIII. Figure-of-8 and Footpiece
IX. Spanish Windlass
X. Pad in ring
XI. Suspension Bar
XII. Hot Water Bottles and Blankets

## Source Thirty One: Rehabilitation for 'shell shock' (RAIL 491/854)

An article from *The Yorkshire Observer*, on the treatment of shell shock at Bradford Handicrafts Club, 28 May, 1918. (RAIL 491/854)

The Yorkshire Observer,

Tuesday, May 28, 1918.

The Treatment of Shell-Shock

--

Work of the Bradford Handicrafts Club.

If you walk down the south side of Forster Square you will pass under a quaint signboard. Painted, as the mediaeval artists have it, "in proper colours," the chains by which it hangs are still bright, and the drab pall of soot and dust has not yet descended upon its bright surface. So it swings bravely over a little door, upon which are painted the words "Khaki Handicrafts Club." Turn in and ascend two flights of stairs, and you will find you have climbed back through as many centuries of social history. The Industrial Revolution has been passed midway on the journey; Arkwright and Stephenson have yet to be born; you are back in the age when craftsmanship was the honoured sister of art. About you, however, are relics, or, rather, wrecks of the very latest phase of civilisation – soldiers in hospital blue. Some are making purses, using a leather thong instead of waxed thread; others are making string bags, either with a netting needle and mesh or by macramé knots; others, again, are making raffia-work baskets, and a few are weaving borders for shopping bags, or embroidering cushion covers with gay-coloured silks.

The reason for their uniform is not immediately apparent. Watch this man by the pillar netting a bag. He passes his needle full of string through the loop in his last row of work, and round the mesh to form a new loop. His thumb then descends upon the mesh to hold the string from slipping while he makes his knot and pulls all tight. No Yarmouth of Galway fisherman could work more neatly. But look closer; look particularly at his hands, and you will see his thumb, broad and strong as it is, tremble ere it closes on the mesh; you will see his needle-point waver uncertainly ere it finds the loop. The mischief is out. These men are suffering from shell-shock, and shell-shock being a diablerie peculiar to twentieth-century warfare, their presence in this secluded corner of mediaeval industry points an ironic comment on our vaunted progress.

HANDICRAFTS FOR SHELL SHOCK

The value of handicrafts in the treatment of shell-shock, albeit generally admitted, is in no danger of being overrated. Work at some craft is made part of the treatment at most military hospitals, but, owing to lack of proper accommodation, proper facilities for instruction, and the absence of all that arouses enthusiasm in the men, it falls oft-times into a position of secondary importance, or is crowded out altogether. A band of public-spirited ladies in Bradford, keen craftswomen, realised how unsatisfactory was this state of affairs. They decided to attempt an improvement, and, guided only by natural sympathy and unbounded faith in the virtue of handicrafts, they yet tackled the business more scientifically than the hospitals had done.

First, the malady being nervous, they insisted on cheerful environment. The room in Forster Square, large, well-ventilated, open to the light on three sides, was the best home for the club that could be found in the city. The men work at long trestle tables; cupboards are provided to story their pieces and the models they copy; and, for the rest, blue curtains against the yellow walls and a bowl or two of flowers make the room a delightful workshop.

Second, to give the men some incentive to work, all articles (except a man's first piece, which he is allowed to keep) are sold, and the maker is paid the difference between the selling price and the cost of materials.

Third, to give the public some incentive to buy, a certain standard of work must be maintained. At first this would seem to have little bearing on the treatment of shell-shock, but it is of vital importance to the life and work of the club. If no standard were set, the men, in moments of impatience of apathy, might become slipshod; the work would deteriorate in quality; it would lost its interest, and the men would finally throw it over in disgust. The teachers set a high standard at the beginning, and by long and earnest consultations on the relative values of knot and splice, of eight-plait and macramé cord, and by ceaseless experiment they have raised it considerably. The result is that there has been a demand for the work, and most of the men are now executing definite orders. The articles made by the club cost more than those sold in a shop, but as they show some marked improvement – a better finish or greater durability – they are worth the price put upon them. A string bag bought at a shop, for instance, is usually a subject of shame to the average shopper. Empty, she folds it up into the smallest possible compass and secretes it; full, she hastens home with it through little-frequented streets, her eyes downcast, hoping she will not be seen. A bag made at the club, however, with its fringes and tassels, its elegant shape and cunningly-wrought handles, may be carried proudly in the light of day before all men. It is an ornament!

THE CHOICE OF WORK

Fourth, and most important of all, to interest the men in the work for its own sake, discretion must be shown in the choice of handicrafts. Robinson Crusoe, that most resourceful craftsman, explained the secret of his success thus: "As reason is the substance and original of mathematics, so by stating and squaring everything by reason, and by making the most rational judgement of things, every man may be in time master of every mechanical art." And there is joy in thus exercising the reason and judgment; and there is satisfaction in contemplating the finished work, the labour of hand and brain. Herein lies all the charm and the virtue of handicrafts. There are certain mechanical arts, however, which yield the last satisfaction without the joy of exercising reasons or judgment. Knitting is a good example, as Dickens showed in "A Tale of Two Cities," and it is obvious that a work in which the mind is free to count heads rolling into a sawdust basket is not suitable for a man suffering from a nervous complaint like shell-shock.

The teachers have striven to avoid these crafts and to discover those which occupy without puzzling the mind, and provide the greatest variety of interest. Adam Smith and his theory about division of labour are ignored. The advantages he urges in favour of his system – increased dexterity and saving of time – count for nothing. What is time to these men with the awful leisure of convalescents, deprived of books and unable to visit the theatre? Of what use is dexterity to those who cannot keep their limbs still? The one drawback to the system – that it makes work monotonous and mechanical – rules division of labour out finally. So a man nets his bag and makes macramé fringes and tassels as well. Truly we are back in the middle ages.

Under this care and though the club has prospered. The room on the floor above has been acquired; four weaving looms, two supplied by the Bradford Technical College and two by the Shipley education authorities, have been installed, and lessons are given twice a week. The doctors at the Abram Peel military hospital, sensible of the value of the club, have modified the rule that no man shall be allowed out in the morning and grant early passes to all craftsmen. So

the membership has grown, until now the register contains the names of nearly 200 men. They came to the club nervous wrecks, some hardly able to walk; they were put to work, netting, or weaving, or stitching, and the charm fell upon them. The brightness of the room, the atmosphere of busy contentment cheered them; the ordered methodical work soothed them; they became interested in the pattern growing daily under their hands, anxious to keep it perfect. The cure had begun.

Some of the men are still at the club, improving rapidly, others have been discharged from hospital and have left the club. For a brief space this peaceful haven of old-world industry was theirs; then out again into the turmoil and complexity of the twentieth century. Sic volvere Parcas.  […s]oldier, however, has learnt better than the [-]lman how to meet the Fates, be their decrees tender or cruel. He leaves his work without a sigh, without a boast to very his regret, and goes out to face them, smiling, unafraid.

## Source Thirty Two: Plastic Surgery (PIN 26/12513)

These documents come from a pension file for a man injured as result of the back fire of a gun during service and severely burned as result. Therefore, he was entitled to a pension for his injury. The documents detail his treatment and provide evidence that some form of plastic surgery was carried out on his eyelid. (PIN 26/12513).

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MINUTE SHEET

Ref: 11/11/93087

Decision of Entitlement

Name Rowland J Late R.G.A

Unverified injury: Burns Face, Hands and Sight

A 16/6 Main claims he sustained above burns through the back fire of a gun in France in October 1917

B103 Shows (W) Burns hands etc. 20.10.17

B178 verifies hospital entries and states caused by back fire of gun. No pre-war history of burns are shewn.

As the condition was present on discharge and there is no evidence man was to blame, it is recommended that the burns be accepted as “Due to” service.

J.W. Weightman 6.7.23

The burns described above may be accepted as attributable to service.

…

**Medical Report on a Soldier Boarded Prior to Discharge or Discharge …**

1. Unit and Corps R.G.A [Royal Garrison Artillery-branch of the Royal Artillery who were responsible for manning the heavy guns].
2. Regt. No. 160238
3. Rank Gnr. [Gunner]
4. Name Rowland John
5. Age last birthday 38
6. Posted for duty on 23/7/16 at Chichester
   in category (or grade) A1
7. Former Trade or Occupation Forman

7a. If the soldier claims previous service in Army he should state-

(a) Former Regiments or Corps with Regtl. Nos.
(b) Date of discharge
(c) Cause of discharge

8. If the disability I an injury was it caused (a) in action Yes
   …

Statement of Case

**If brought forward for invaliding, disability in respect of which invaliding is proposed to be stated here**

G.S.W. [gunshot wounds] burns-backfire from gun, face, hands, left leg

11. Date of origin of disability 16.10.17

12. Place of disability Ypres

13. Give concisely the essential facts of the history of the disability in so far as it is recorded in the Medical History Sheet bearing on the case and in other relevant official documents.

Very severe burns over face, head and hands and thigh (left). Developed Erysipelas [acute infection usually with a skin rash]

15. In all cases such as facial injuries, eye, ear, nose and throat, a specialist's report is to be attached with radiographs [X rays] were possible and in cases of amputation the exact position should be stated

[Photographs are also included with these documents, not shown online]

15. What is his present condition?
…

Wounds all healed. Very severe facial deformity, epiphora [excessive watering of the eye] - both eyes. Deformity of both ears. Very severe burn of scalp. Destruction of all hair follicles. Burns of extensor aspects [muscles of the hand] both hands causing stiffness. Slight burn of left ext. aspect of thigh.

16. Was an operation performed? If so when and what was its nature? Yes

Epithelial Outlays [First World War was important in the development of plastic surgery. This was a skin grafting technique developed by Gillies to treat burns to eye and eye lids]

8. VI.18 Epithelial Outlay
26.3.19 Outlay
20.6.19 Plastic to left lower eyelid

…

19. Give particulars of any other disabilities existing, but not in themselves sufficient to cause invaliding. State whether or not they are attributable to or have been aggravated by service during the present war, and if so, to what or by what specific military conditions. Defective vision

20. Do you recommend? That a wig be provided

(a) Discharge as permanently unfit

(b) Change to United Kingdom...

## Source Thirty Three: Sir Harold Gillies (Work 25/23)

Extract from a script by Sir Eric Gillies describing the development of plastic surgery in the First World War for the Health Pavilion at the Festival of Britain 1951. (WORK 25/23)

Script for the Health Pavilion on

PLASTIC SURGERY-by SIR HAROLD GILLIES

Before World War I Plastic Surgery was scarcely practiced as a speciality. Cases were indeed treated and have been so since the earliest times of Vedic India. Mostly the work was undertaken by whatever surgeon or specialist received the case, although there were a few outstanding exceptions. But it needed the impetus of the face mutilations of the Battle of the Somme, 2,000 in ten days, the advantages of team work, of improved asepsis, and above all of general anaesthesia, to establish the beginnings of a separate speciality treating all kinds of superficial mutilations or defects of any part of the body.

In 1917-18, 11,000 facial injury cases went through the Queen's Hospital, Sidcup, and treating them were British Canadian, Australian and New Zealand teams of surgeons and dental surgeons. The place was internationally renowned and visited by many, including King George V and Queen Mary. The United States' teams also paid a long visit. Sidcup can with truth claim to be the birthplace of modern plastic surgery.

At the end of the war the infant would have died had it not been for the continued interest and devotion of Gillies and Kilner. A long battle of "showing the flag" in the civil adaptation of Plastic Surgery was rewarded by a department of Plastic Surgery in the L.C.C. Medical Services in about 1926, and later St Bartholomew's in 1930 and St Thomas's in 1934 appointed a Plastic Surgeon to their staffs.

…

## Source Thirty Four: Treatment of gunshot leg wounds (MH 106/2116)

These two medical case sheets concern the treatment for gunshot wounds to the leg. The first patient had a special attachment to the shoe fitted to raise his foot and allow him to walk and the second was wounded so badly that he had his leg amputated and an artificial leg fitted. (MH106/2126)

| … | | | | Army Form I 1237 |
|---|---|---|---|---|
| | | Medical Case Sheet | | |
| No, in Admission and Discharge Book 4148. G | Regimental<br><br>No. 5349 | Rank<br><br>Corporal | Surname<br><br>Titmass | Christian Name<br>James |
| Year | Unit | | Age | Service |
| 195 | 2nd Bedfords B | | 30 | 13 years |
| Station & Date<br><br>24.VII.15<br><br><br><br><br><br><br>29.VII.15<br>1.VIII.15 | <u>Disease: G.W.S [gunshot wound] of lower left leg 1244 a.</u><br><br>Returned from Convalescent Home (Roplin) on 20th. Examined by Lieutenant Roberts, sent to Colonel Griffiths.<br>Wound of Entry: ½ inch from lower margin of Patella either side<br><u>Injury to nerve</u><br>Wound of Exit: 4 inches above extension malleolus [ankle bone]<br>No sensation below wound of exit<br><u>Drop foot</u><br>Saw Colonel Griffiths<br>Has attachment to left shoe fitted by L. Lawson which raises the foot on the ankle<br><br>For gymnasium A.C.<br>For CH (Convalescent Home)<br><br>[Diagram to show attachment fitted to shoe which was used to raise the foot]<br><br>A Cooke Major R.A.M.C. (T) | | | |

| [3rd Southern General Hospital, Oxford] | | | | Army Form I 1237 |
|---|---|---|---|---|
| Medical Case Sheet | | | | |
| No, in Admission and Discharge Book EA 966 | Regimental No. 10413 | Rank Private | Surname Lee | Christian Name Patrick |
| Year | Unit | | Age | Service |
| 1914 | 2 Connaughts Regiment | | 22 | 3 [years] |
| Station & Date 11th Nov. 1914 | Disease: Wound & Amputated Left leg 1244 (G.S.W. leg-gunshot wound)<br>Sept. '14 returned had wounds & Left leg was much shattered and on 24th Sept leg was amputated. On adm [admission] Amputation wound well healed, but patient in rather poor condition. | | | |
| Nov 14th | … | | | |
| Nov 19th | The cicatrix [scar tissue] is quite dry, no pain in stump complained of. To be bandaged. Patient allowed to be about on crutches. | | | |
| Dec. 20th | Patient has been measured for an artificial leg which us supplied by Messrs Masters & Sons 240 New Kent Road. The stump is now perfectly healed free from pain and apparently has assumed its permanent form and thickness. | | | |
| 1915 Jan 7th | Patient has now been fitted with an artificial leg which appears to be quite comfortable. | | | |
| Feb. 4th | The leg is a good fit, and patient gets about without the aid of a stick and with wonderfully little lameness. | | | |
| Feb. 24th | Discharged to come before Board.<br>William Turner M.D. C/O Milton Hill Sect. Hospital | | | |

## Source Thirty Six: Rehabilitation after blindness (PIN 15/1054)

These two pages come from a booklet about St Dunstan's Lodge, Regents Park a hostel for blinded soldiers and sailors set up as a charity in March 1915. Men were taught different trades to try and make them economically independent. These included poultry-keeping, gardening, carpentry, typing and reading and writing in braille as well as the other trades outlined in the extract. There were social activities, and sports as well. It was maintained by the British Red Cross Society, the Order of St John of Jerusalem and the National Institute for the Blind, and supported by public donations. The booklet comes from pension records about the treatment and training for the blind (PIN/1054)

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**OUR BLINDED SOLDIERS AND SAILORS**

[Photograph of a man with bandaged eyes]

**HOW THEY ARE BEING TAUGHT TO BE "BLIND"**

[Photograph of a man being taught how to operate a telephone switch board by a woman

Caption: Telephony for the Blind

London is wonderful and bewildering, and in the workrooms there is laughter, cheery happy voices, and chatting and whistling, for happy sound has to be substituted for happy sight, and a more cheerful set of fellows over their work it would be hard to find. In one corner of the long gallery shoes are being re-soled with a solidity and finish that not many a full-sighted cobbler might envy. Further along doormats are being made- firm and solid; no amateur work this, but stuff to compete with anywhere; baskets of every conceivable shape and size, good and well finished and serviceable, and on the other side of the room a carpenter's bench where frames are being turned out that would not disgrace the most lynx-eyed workmen. One watches with amazement, not only the precision of direction, the sureness of touch.

…

## Source Thirty Seven: Faradic Treatment (MH 106/2139)

From 1916 onwards Officers' Command Depots were set up for the rehabilitation of soldiers too fit for a convalescent camp, but not fit enough to return to a unit. This card recorded sessions for electrical massage know as faradic treatment at Ripon (South) Officers' Command Depot. An electrical current was used to stimulate the blood supply in the muscles of wasted limbs. Sometimes it was employed to treat shell shock cases. (MH 106/2139)

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Electrical Massage treatment

OFFICERS COMMAND DEPOT RIPON (S)

Leicester Regiment

Depot No. 384 Rank 2nd Lieutenant Name: York R.J.

Company A Division III A

Diability G.W.S. [Gunshot wound] Rear Arm left

Treatment ordered ½ Hour Faradic

Treatment begun, Date----------

3.30 8.10.18

…

Treatment ended 31.12.18

Result Some improvement

…

## Source Thirty Eight: Hearing aids for 'gun deafness' (PIN 38/450)

Extract from a brochure produced by company called Stols about their hearing aid, the ELECTROPHONE sent to the Ministry of Pensions. In this page makes a direct appeal to ex-service men of the First World War (PIN 38/450).

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MANY thousands of Soldiers and Sailors have had their hearing afflicted by artillery fire- the din and all the shocks connected with it having been too great a strain for the delicate mechanism of the ear.

If you are a man affected in this way-if you have a Soldier or Sailor relative or friend suffering from gun deafness-get in touch with the Stols Electrophone Co. and learn how relief can be given.

GUN-DEAFNESS may be temporary or permanent; in any case it is annoying and even painful. If speedy relief is desired, or if permanent relief is necessary, the Stols Electrophone should be chosen.

In cases like these especially its special device, enabling the instrument to be adjusted to the degree of deafness existing, is of advantage beyond description.

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Letter to the Ministry of Pensions from Fortiphone, another hearing aid manufacturer, 23 February 1926 (PIN 38/450)

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Langham House
308 Regent St.
London W.1

Medical Services Division
Ministry of Pensions
Sanctuary Buildings
Great Smith Street
S.W.1

February 23rd, 1926

Gentlemen,
We invite your attention to the Fortiphone hearing instruments for the deaf as illustrated in the enclosed catalogue.

The Fortiphone represents a distinct departure from the old style of hearing aids and embodies many new and exclusive features which mark it as being unquestionably superior to any other device made for similar purposes.

We may state that we have already demonstrated the Fortiphone to a number of former soldiers who are receiving pensions from the Government. These men have found the Fortiphone most satisfactory and have declared it to by far the most advantageous aid they have tried.

We respectfully invite your investigation of the Fortiphone, and we will be very glad to allow you a discount of 33-1/3% from list prices.

Assuring you of our desire to serve you in every way possible,

We are,
Yours faithfully,
FORTIPHONE LTD S. Sylvester

## Source Thirty Nine: Gas attack (WO 95/1952)

Extract from a report about a gas attack on the 12th Battalion of the Highland Light Infantry, September 1915 (WO 95/1952)

12th Bn. [Battalion] High. L.I [Highland Light Infantry]

Report of the O.C. [Officer Commanding] No.5.Column

25th and 26th September 1915

The gas attack commenced at 5.5.am on the 25th. Unfortunately two (or three) of the cylinders burst and several more were leaky and we had several casualties through men being “gassed”.

This I can only attribute to carelessness as the helmets were most efficient. At 6.30 a.m. prompt assault began. I could see the left, or “B” assaulting party deploying but owing to the thickness of the smoke I was unable to see the right, or “A” party, going out. Owing to the smoke, visual signalling was impossible, and as I had no word from either “A” or “B” party, at about 6.50 a.m. I sent across a runner to each party for information. Neither of these runners returned. At about 7.10 a.m., after speaking to the Brigade Major on the telephone, I was about to take my reserve over to the German trenches when I received word from both =A” and “B” Company Commanders. From “A” Company that the German front line and support trenches were taken and from “B” Coy that Southern Sap was taken. I immediately sent on these messages to the Brigade and at once proceeded across the Reserve…

## Source Forty: Injury by gas (MH 106-2154)

This army medical card was only used for men who served with the B.E.F. on the Western Front and is another type of army form used to record medical cases. This card represents the case of a soldier admitted to Leeds Killingbeck Military Hospital for convalesce due to the effect of gas (MH106/2154)

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For Expeditionary Force Cases only. Army Form W.3243A.

[STAMP] EAST LEEDS HOSPITAL KILLINBECK SECTION

State from which Force: R.F.A. [Royal Field Artillery] Serial No. A & D Book: T15488
[Admission & Discharge]
[Troop, Battery or Company]: 310 Brigade, 62nd Division B. Battery
Regimental No. 775461
Rank: [Gunner]
Name: Tunley L.
Age: 26 Total Service: [3 years 4 months]
State Service with Field Force in months [1 year 4 months]
(a) Date of arrival at Hospital as an admission 25 April 1918
(b) As a transfer (state where from) Convoy
Date of discharge to duty 4.5.18 Furlough II
" " " by change of disease

" " " as an invalid

" " death

" " transfer (state where to) (Name of Hospital to be given)

No. of days under treatment 11

---

Observations:-

To be filled in by Medical Officer in charge of case

Disease: Gassed (shell)

Operations

Result of operation

Complications in order of occurrence

[Convalesant] on admission. Gassed April 5th 1918.
Pains in chest & sore throat
Slight cough, allowed up & passes out. Feels much better. [Recommend] Furlough [leave] Section II

Signature of Medical Officer …

One of these Red cards is to be completed for every Expeditionary Force patient received into hospital. Black cards for U.K. troops.

## Source Forty One: Gas casualties and medical transport (WO 95/1892)

Extract from the War Diary of the 44th Field Ambulance a mobile army medical unit operating near the front line, February 1916(WO 95/1892/1) and an extract from the War Diary of Divisional Field Ambulance Workshop Unit, July 1916 (WO 95/1892/3) which shows some of the problems of maintaining the medical vehicles.

WAR DIARY
or
INTELLIGENCE SUMMARY

| Place | Date | Hour | Summary of Events and Information | Remarks & references to |
|---|---|---|---|---|
| POPERINGHE | 1/1/16 | 10pm | Adm. (1 Officer To C.C.S. 21 To D.R.S 91 To other F.A. 11<br>Duty 21<br>(120 [Ordinary Ranks]<br>HAZEBROUCK<br>91 D.R.S. cases transferred to 12. C.C.S.<br>Attended corps conference at 2.30-Discussion re. gas<br>Regimental Medical Officers 11th Division gave experiences-helmets satisfactory if put on quickly- some cases recorded of men doing duty during day after gas attack and collapsing in morning. Phosgene suspected D.M.S 2nd Army stated that French had found atropine [treatment for gas poisoning] of little use unless given at once. Retrieved bearers [stretcher bearers] at aid posts tonight | |
| Ditto | 2/1/16 | 9pm | South West wind, rain.<br>Adm. C.C.S.<br>2 Officers Officers 6 Duty 13<br>56 Ordinary ranks O.R. 22<br>43rd F.A. under instructions from A.D.M.S took over collection of left sector to night. Cars only proceeded to dugout near ESSEX FARM.<br>3 motor ambulances, 42nd F.A sent back. | |

Adm: Admitted
C.C.S. Casualty Clearing Station
D.R.S. Divisional Rest Station
F.A. Field Ambulance
A.D.M.S. Assistant Director Medical Services

## Source Forty One: Gas casualties and medical transport (WO 95/1892)

| WAR DIARY or INTELLIGENCE SUMMARY | | | | |
|---|---|---|---|---|
| Place | Date | Hour | Summary of Events and Information | Remarks & references to appendices |
| | July | | | |
| Hilhock | 22 | | 4 cars in repair | |
| | 23 | | 5 " " " | |
| | 24 | | 3 " " " | |
| | 25 | | 2 " " "received orders from D.H.Q. to march on 26-7-15 to St Jean (Waton) | |
| St .Jean | 26 | | Marched at 12 noon to St. Jean-ta-Biezen (Waton) Arrived 12.30. One car in tow (under repair). Erected latrines & incinerator etc & arranged shelters for working under. Personnel went into billets. Wet day and some trouble was experienced in getting lorries out of field in which they were parked. | |
| | 27 | | 1 car under repair | |
| | 28 | | 1 ambulance, 2 drivers from No. 1 M.A.C. [motor Ambulance Convoy] to replace casualty of 8th instance. 2 cars for repair | |
| | 29 | | 3 cars for repair. One Ambulance in collision with a tree owing to breakage of steering arm. Front of car very badly damaged & beyond loval repair. Towed it to Railhead & sent it to Paris repair shops. | |
| | 30 | | 2 cars for repair. I ambulance & 2 drivers from No 1 M.A.C. to replace yesterday's casualty | |
| | 31 | | 6 Cars for repair, very busy. Heavy casualties last night & roads between Ypres & Aid posts in very bad condition, several Ambulances caught under shrapnel fire & bodies damaged all the cars in today have broken springs. | |

## Source Forty Two: Wilfred Owen (WO 138/74)

This document records the decision of an army medical board regarding an officer, in this case, war poet, 2nd Lieutenant, Wilfred Owen (WO 138/74)

CONFIDENTIAL Army form A.45

PROCEEDINGS OF A MEDICAL BOARD

Assembled at WELSH HOSPITAL NETLEY ON 25.6.17

By order of A.C.I. 423 dated 9/3/17

For the purpose of examining and reporting upon the present state of health of

(Rank and Name) 2/Lieut. Wilfred Owen (Corps) 5/attd.2 /Manchesters.

Age 24 Service 1.9/12 Disability Neurasthenia (143)

Date of commencement of leave granted for present disability……..

Date on which placed on half-pay for present disability……

The Board having assembled pursuant to order, and having read the instructions on the back of the form, proceed to examine the above-named officer and find that

In March 1917 he fell down a well at Bouchoir, and was momentarily stunned. He was under Medical treatment for 3 weeks, and then resumed duty. About the middle of April he was blown up by a shell explosion while he was asleep. On May 1st. he was observed to be shaky and tremulous, and his conduct and manner were [peculiar], and his memory was confused. The R.M.O. sent him to No.41 Sty. [Stationary Hospital], Gailly where he was under observation and treatment by Capt. Brown R.A.M.C. Neurological Specialist for a month. On 7/6/17 he was transferred to No.1 G.H. [General Hospital] Etretat, and on 16/6/17 to the Welsh Hospital Netley. There is little abnormality to be observed but he seems to be of a highly strung temperament. He has slept well while here. He leaves Hospital to-day transferred to Craig Lockhart War Hospital, Edinburgh for special observation and treatment.

The Board will classify the officer under one of the following categories, <u>the probable period of unfitness for the higher categories being stated.</u>

1. Fit for General Service ……Unfit for six months
2. Fit for service in Garrison or Labour Battalion abroad. No office likely to be fit for general service within six months should be classed in this category
   Not applicable
3. Fit for Home Service……Unfit three months
4. Fit for Light Duty at Home……Unfit three months
5. Requiring indoor hospital treatment-
   (a.) In an Officers' Hospital……Yes
   (b.) In an Officers' Convalescent Hospital……Not Applicable
6. (a.) Fit for light duty at a Command Depot…… Not Applicable
   (c.) Fit for treatment only at a Command Depot…….Not Applicable
7. In very special cases such as tuberculosis leave…… Not Applicable
   not exceeding six months may be recommended by
   Medical Boards for special treatment, the Board
   giving <u>details reasons for any such recommendation</u>

8. Was the disability contracted in the service? Yes
9. Was it contracted under circumstances over which he had no control? Yes
10. Was it caused by Military Service? Yes
11. If caused by military service, to what specific military conditions is it attributed? Active Service in France
12. If the disability was not caused by military service was it aggravated thereby, and if so, by what specific military conditions? Not applicable

Officer's Address

Malsin, Monkmoor Road, Shrewsbury

…

## Source Forty Three: Ambulance Transport (ZPER 34/147)

Drawing from the Illustrated London News showing British ambulance cars, 10 July 1915 (ZPER 34/147)

After the day's work in Flanders: the passing of the Red Cross – British Ambulance-cars on their way from the field-hospitals to Boulogne.

This long-drawn-out procession of British motor-ambulance-cars is one of the sights but too sadly familiar day by day along the tree-fringed highways that lead across the Franco-Belgian frontier from the trenches in the district round Ypres and Neuve Chapelle to the advanced base-hospital and clearing-house for the wounded, just within the French frontier, and thence to Boulogne, where is the main British base-hospital, and whence the hospital-ships leave for England. The picture of the swiftly moving, smoothly, almost silently, running grey-bodied cars, each carrying its four stricken occupants on their stretchers, with grey canvas hoods badged with the staring red Geneva cross in its white circle, tells its own tale with sufficient completeness. 'One of the most remarkable features in connection with the work of the British Army in the field,' says a special correspondent of the 'Times,' 'is our ambulance and hospital work. It is admittedly far in advance of anything that has ever been done in this way before…. None of these hard-wrought Red Cross men could be other than a gentle, kindly man. You can see they are by watching them at their work.'

Facsimile drawing by Frederic Villiers, our special artist in the Western Theatre of War. [Copyrighted in the United States and Canada.]

## Source Forty Four: Development in X-rays (ZPER 34/147)

Article with drawings and photographs from the Illustrated London News showing developments in X-rays used to detect bullets in wounded soldiers, 6 February 1915 (ZPER 34/147)

Illustrations Nos.1 and 2 show the method of working an apparatus made by the Medical Supply Association, who write: 'When the patient is on the X-ray couch the negative is placed in position beneath the part to be radiographed, and on the negative is placed a small apparatus consisting of two metal cylinders and a steel rod (N), all of known length. A radiograph is then taken with the bulb from which the X-rays emanate slightly out of centre; then, without moving the patient or the negative, the bulb is shifted about ten centimetres to the opposite side, and another exposure is made on the same negative. When the negative has been developed, all the bodies between the X-ray bulb and the plate have thrown a double shadow, as seen in Illustration No. 2. By drawing lines from the dark edges of the shadows on the cylinder until they intersect each other, two measuring points are set up, L and L1. The pieces of shrapnel in the limb have also cast double shadows, and by drawing lines from these (dotted in the illustration) to the points L and L1, an intersecting point X will be obtained, and directly beneath this point the foreign body will be found. By a further calculation the exact depth can be ascertained.

1. Used in British, French, and Russian military hospitals: the 'Kompact' X-ray installation, arranged for radiography above the couch.
2. The use of X-Rays in treating a Belgian soldier wounded at dixmude: showing pieces of shrapnel in his body, and angles obtained from shadows.
3. The use of X-Rays in treating a wounded British officer: a stereoscopic photograph taken, by means of x-rays, for the purpose of localising the bullet – showing (near the top) a circular wire on the wound of entrance.

The wounded solider of to-day has the benefit of many wonderful inventions of medical science, including new developments of radiography and the use of the telephone for localising bullets of other foreign bodies, such as pieces of shrapnel, in the human tissues. In an article in the 'British Medical Journal,' Sir James Mackenzie Davidson, who is consulting-Surgeon to the Roentgen Ray Department at Charing Cross Hospital, gave a deeply interesting account of his discoveries and experience in this branch of surgery. He showed that an ordinary X-ray photograph of a bullet or shell-fragment in the flesh is not sufficient to localise it for surgical purposes, inasmuch as space has three dimensions, and a single shadow-picture gives no certain knowledge as to the depth to which the foreign body has penetrated or its position in relation to other structures. He then explained in detail a method of localising foreign bodies by X-rays, in which cross-lines of measurement and stereoscopy play an important part. The diagrams on the right show this method and also the use of the telephone for localising metal objects. Of this latter device Sir James Davidson writes: 'The surgeon… will hear with great distinctness the characteristic microphonic rattle the instant his instrument touches any metal embedded in the patient's tissues.' One drawing illustrates an experiment on a potato with a piece of metal embedded in it. Illustration no. 3 shows a stereoscopic radiograph by Sir James Davidson's method.

## Source Forty Five: Stretcher bearers under fire (ZPER 34/148)

Photograph from the Illustrated London News entitled: The British Advance: collecting wounded under fire: With a great shell bursting near them: A stretcher squad on No Man's Land picking up a wounded man; and another (composed of German prisoners) bringing in another stretcher case, 7 October 1916 (ZPER 34/148)

The task of the stretcher-bearers, whose work it is to collect the wounded during a battle, is extremely perilous and is performed with the utmost devotion. They have to brave the dangers of the enemy's barrage fire which falls behind our attacking troops to hinder the advance of reinforcements. On this photograph a big shell is seen bursting close to a stretcher squad engaged in picking up a wounded man, the huge smoke-cloud looking like nothing so much as a weird picture of a genie or afreet in an 'Arabian Nights' story. The other squad to the right, who have already taken up another wounded man and are bearing him back towards a dressing station, is composed, it may be noted, of German prisoners, many of whom are employed in emergency to help in this work. They are usually glad to do it, being thankful to have so far escaped with their lives; but it sometimes happens that German prisoners are killed by shells from their own guns before they can reach the security of our prison-camps.