

4.3. BLOOD DISORDERS.

Restoring blood production especially after blood loss

Dinamol reputed to be effective against many disorders including anaemia.



Busta Lettera Postale (BLP) - Postal Letter Envelope (with letter insert), the adverts paid for a discounted stamp to be affixed to it, overprinted with BLP - the profits going to the Post Office with a large proportion going to an Organisation that assisted the war wounded.

Treatments for blood production

and Radsojan for blood production

Dr. Koch's meat-peptone advertised as the most effective of all known means of nutrition for anaemia in women following childbirth, when blood loss must be prevented...

Private printed to order postal stationery, 1905

Private printed to order postal stationery, 1905

Ernst Pascher
WELZOL

Deutsche Reichspost
Postkarte

3a

Postcard with handwritten address and a circular postmark from WELZOL.

Dr. Koch's Fleisch-Pepton.
F. L. Stollwerck & Co. Köln.

4.4. LOSING THE LIFE BLOOD.

bleeding can also cause anaemia

Loss of blood from bleeding either from trauma or inherited as in the case of haemophilia can be life threatening



Haemophilia had been recognised by Arabian physicians Ibn Al-Naphis in the seventh century as an inherited haemorrhagic disorder affecting only boys, particularly noticed after circumcision



Eric Von Willebrand first described another inherited bleeding disorder affecting both sexes, originally occurring in the Aland Islands

Haemophiliacs will require specialised treatment in specialised haemophilia centres.



Meter: Pimey Bowes, R series

Haemophilia is due to a deficiency of the blood clotting protein either factor VIII (8) or very rarely factor IX (9).



Experimental Maltese Cross postmark with No's 8 & 9 in centre, used to identify individual stampers. In use in main London Office from Mar 1843 to Apr 1844.



In the 1940's the second type of haemophilia was described due to a deficiency of factor IX (9), this was called Christmas disease (the 1st patient described was named Christmas and the 1st paper describing it was published near Christmas).

1943 Kodak military airmograph from Egypt

ROYAL HAEMOPHILIA: Queen Victoria was a carrier of the disease, her 8th child Prince Leopold suffered from the disease and she also had 4 daughters who were carriers of the disease. As a result members of several European Royal Families suffered from haemophilia. It has now been discovered (2009) from genetic analysis that the Royal Families suffered from the much rarer type of haemophilia.



Her granddaughter Victoria Eugene, married Alfonso XIII of Spain. Their son, Alfonso on right, was a haemophiliac

Alfonso XIII overprint



Die proof

Another granddaughter Alexandra married Czar Nicholas, they had a haemophiliac son Alexis (2nd from right)



Miss M. Bown
36, HAYS STREET,
VICTORIA STREET,
GREENSHAW,
BRANDBURGH
ENGLAND

Christmas Greetings
from The Eighth Army

"Together, you and I
we will see Nazi things through
to the end"

4.4. LOSING THE LIFE BLOOD.

A variety of medicines, have been tried to prevent and stop bleeding

preventing bleeding

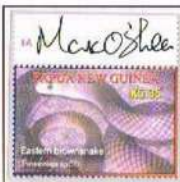
5 A MODERN MEDICINE FROM AN ANCIENT MYTH.

1. EARLY BEGINNINGS

blood transfusion begins to develop
scientists were convinced blood had life giving properties



Stops spitting of blood and blood in urine



The venom of the Eastern Brown snake used to stem blood loss. Tab signed by Mark O Shea, stamp designer and herpetologist

RHINOSTOP
stoppt
RHINITIS
und alle anderen vasomotorischen
Erkrankungen der Schleimhaut.

Der Oto-Rhino-Laryngologe verwendet es bei:
vasomotorischer Rhinitis, zur Regulierung von Ekalüternschleim, Asthma bronchiale, bei subakuter Bronchitis, Katarhen der Tubaen und des Mittelohres, zur symptomatischen Behandlung des Nasheifers usw.

Packungen: Behälter mit 10 Amp. zu 1 ccm
Spezialpackung mit 10 Amp. zu 1 ccm

Falls Sie die Wirkung der Präparate bereits kennen, bitte ich Sie, dieselben im Auge zu behalten und in vorerwähnten Fällen anzuwenden. ● Sonst stehen Ihnen zur Bildung Ihres eigenen Urteils Versuchsungen und Literatur selbstverständlich gern zur Verfügung.

SIMON'S APOTHEKE · BERLIN C 2 · SPANDAUER STRASSE 17

STRYPHNON Nach Prof. G. H. Meyer
und Prof. Dr. P. Albrecht
stoppt
HAEMORRHAGIEN
fächerhaften und parenchymatösen
Charakters, Keim-venöse und okkulte
Blutungen.

Der Oto-Rhino-Laryngologe verwendet es bei:
Operation der Mundhöhle, Tonsillitis,
Adenotomie, Urethranplastik, Septumreaktion,
Adenotomie, Totiaufmeißelung usw.

Packungen: Glas-, Fasertabletten, Jodoform-
Strophonbinden, Pulver (als Streu- und
Einblasmaße)

Injektionen:
subcutan 0,5% 6 Amp. à 2,2 ccm
intravenös 0,5% 6 Amp. à 2,2 ccm

Excessive bleeding, (even bleeding from the gums) can lead to
anemia and/or shock, and may require a blood transfusion.

U.S.S.
DEC
17
1933
8 AM
PARACELUS
BORN=1493

F. SHEDLBOWER
22-67 7th AVE
LONG ISLAND CITY N.Y.

Postmark and cachet from the US hospital ship, USS Relief

Each Pipe of Phoenix Tobacco
guarantees Guardian Accident Company's
Policy for...
...Killed
...in Victoria...

DR. L. L. SMITH.
Mornings and Evenings.
FEE BY LETTER. £1.
Dr. BROWN-SEQUARD'S Hypodermic In-
jections of Organic Liquids used (as taught
personally to him by Dr. Brown-Sequard in
Paris).
DR. L. L. SMITH, 41 COLLINS ST.
Melbourne.



George Hayem, made his mark by his work on the transfusion of artificial serum in 1881...

INSTITUT D'HÉMATOLOGIE
INSTITUT DE RECHERCHES
SUR LES MALADIES DU SANG
CENTRE HAYEM
Lieu: Claude Bernard
75475 PARIS CEDEX 19

PARIS CAPITAL ST. MAURIN
13.12.85
REPUBLIQUE FRANCAISE
00220
POSTES N° 1052

Meter: Secap

The invention of the first transfusion giving apparatus was probably made by Francesco Folli in 1654

250 MESSIMO
2002 CINQUELLI
26-4-1985
PHILEMA

In the 1850's Brown-Sequard, by the transfusion of defibrinated blood discovered that it will restore the irritability of the muscles after a corpse had become rigid, but he did not realise the full potential of this observation.

40cs
MAURITIUS

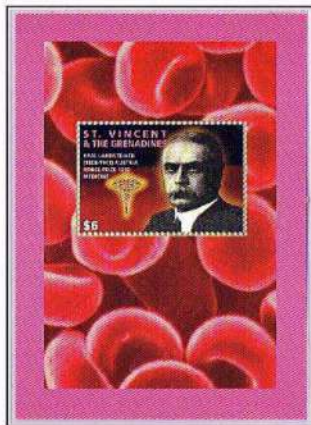
Before any further developments could proceed a vital discovery was necessary...



The following chapters examines the science of blood transfusion in detail...

5.1. EARLY BEGINNINGS

Regarded as the father of modern day blood transfusion, Landsteiner, in 1901, discovered the ABO blood group system...



...by observing the agglutination pattern ie sticking together of red cells, (shown on left), Landsteiner made the theory that antibodies linked the red cells together (similar to two imperforated stamps joined by a gutter), and thus worked out the main ABO blood groups.



Imperforate phase proof pair in final colours with gutter



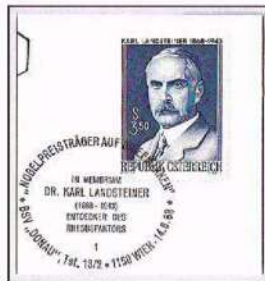
Initially he identified 3 groups A, B and C (later became O or zero),



in 1902 he identified a 4th ABO type, group AB, so there are now 4 main ABO groups - A, B, O & AB.



The designation A and B with reference to blood groups was proposed by Ludwik Hirschfeld, and in 1911 he discovered the inheritance of the blood types



In 1937 Landsteiner made a further discovery, that of the Rhesus (Rh) blood group system, by using red blood cells from the Rhesus macaque monkey.



IN MEMORIAM
DR. KARL LANDSTEINER
1868-1943
ENTDECKER DES RHESUSFAKTORS
1. FEBRUAR 1928
WIEN 114-89

NOBELPREISTRÄGER AUF
REPUBLIC ÖSTERREICH

SPRINGFIELD, ILL. FEB 20 4 PM 1928

CHICAGO ST. LOUIS C. A. M. 2
LINDBERG
SPRINGFIELD, ILL. 2-20-28



Alexis Carrel, a vascular surgeon famous for his method of suturing blood vessels, made in 1908, the first transfusion to a newborn baby,



Carrel developed a method of suturing blood vessels.

Enlarged section of stamp

Carrel was assisted by Lindbergh, it was Carrel's medical skills combined with Lindbergh's engineering knowledge that made them a strong team for their later venture of inventing an artificial heart pump machine, Lindbergh of course became more famous as an aviator.



The inaugural flight of Contract Air Mail Route 2 (C.A.M. 2) took place on the 15th April 1926, when Charles Lindbergh flew the south-bound flight from Chicago to St. Louis. In 1928 on the 20th & 21st February, Lindbergh flew the mail again on his original route.

blood group discovery advances transfusion techniques

5.2. BLOOD TRANSFUSION SERVICES

out of war a modern service is born

By the time of the First World War, the importance of blood transfusion was beginning to be recognised and further developments such as...



...in 1914 Agote in Argentina discovered how to store blood in an anticoagulant, so it could be used at a later date, the anticoagulant sodium citrate, the trisodium salt of citric acid, originally derived from citrus fruits.



In the same year Husin added sugar in the form of glucose to the sodium citrate to further extend the life of stored blood.



Sodium citrate chemical structure



Following these developments it became apparent to the Red Cross medical teams and military hospitals that the transfusion of stored blood was a life saving form of treatment for the wounded.

It was at this time philatelic appeals for funds for the Red Cross were initiated



First Red Cross overprinted stamps and stamps, with surcharge, issued in 1914



Date stamp applied at Base Post Office, Australian Imperial Forces, mainly on mail routed via France. Franked by Australian Auxiliary Hospital, Horefield, Midx. 1918



1900's Sucre cancellation. Sucre, the legal capital of Bolivia, renamed in 1825 in honour of Antonio José de Sucre. His surname may be of Anglo-Saxon pre 7th century origin and is probable an occupational name for a dealer in sugar.

WWI Military hospitals, hospital ships, hospital trains, at this time, all used blood transfusion in a limited form only...



5.2. BLOOD TRANSFUSION SERVICES.

In 1921 members of the British Red Cross, Camberwell Division became the first voluntary blood donor group.



Missing red ▲ doctor blade flaw ▲ Phosphor (3 bands) ▲



Research continued with Bordet who improved transfusion giving sets by coating them in wax...

...and Burdenko then established the point at which a blood transfusion became necessary.



In the 1930's Sergie Yudin pioneered the use of cadaver blood for transfusion, and established storage centres in the USSR

civilian blood donor services established and research continues



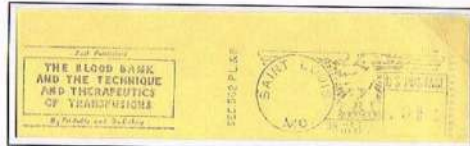
Other countries soon followed the idea, the first voluntary blood donors groups (AVIS) in Italy were formed by Vittorio. Formentano, and Alberto Finazzi.



5.2. BLOOD TRANSFUSION SERVICES.

further developments and wartime intervenes

The term 'blood bank' first appears



The term 'blood bank' was first used in the late 1930's, Kilduffe & DeBakay published their book in 1941

Meter: Pitney Bowes, series R.
P.L. & R. - Postal Laws & Regulations

The impact of war would again accelerate developments; Norman Bethune, a Canadian physician, established a Red Cross blood transfusion unit during the Spanish Civil War (1936-39), he later set up clinics in China where he died from septicemia (blood poisoning)



China & Canada joint issue

Kotnis followed Bethune's example during the Sino-Japanese war of 1938



normal gummed on both sides

The outbreak of World War II would now further accelerate the formation of these centres, in England and Wales eight regional transfusion centres were opened, as part of the Emergency Blood Transfusion Service...

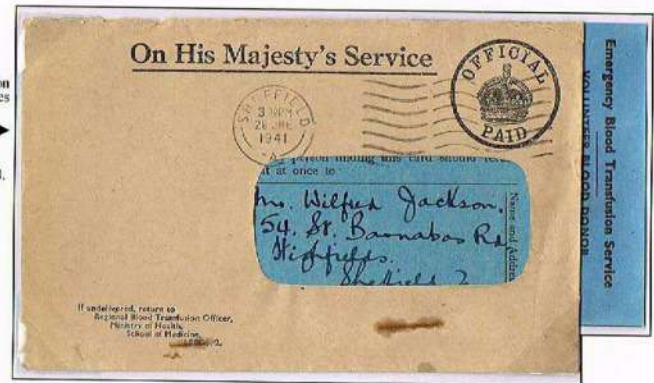
Official paid envelope used by EBTS with enclosed card ▶

...and in Scotland the Scottish Blood Transfusion Service was established in 1940.

GB slogan postmarks are normally printed in block ink, on this special occasion a 'blood' red ink was used. ▼



The Hospital of Blood, Cambrils was established to treat the war wounded 1938 Spanish civil war military cover postage exempt.



Emergency Blood Transfusion Service
YOU MAY RECEIVE BLOOD DONORS

Following the outbreak of World War II, the Army Blood Supply Depot was established at...

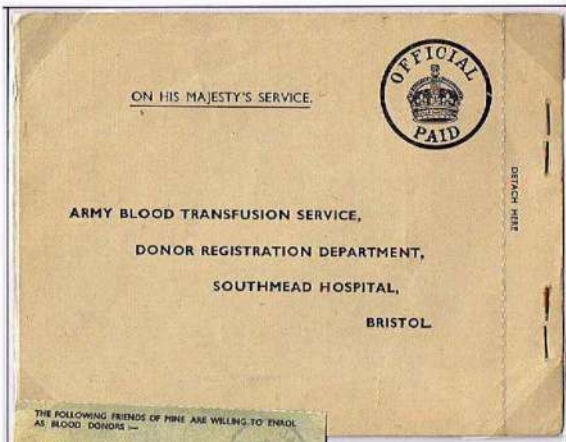
... Bristol in 1939 and later moved to Aldershot



The Army Blood Transfusion Service provided blood components for the military field hospitals, as shown here during the North Africa desert campaign



PLATE 33: DISPENSER BEING COLLECTED. PLASMA GIVER. BLOOD FROM ADVANCED BLOOD BANK CARRIED TO THE FRONT AREA. THIS PLASMA WILL BE USED AT THE CASUALTY CLEARING STATION.



◀ Reverse of official reply paid form above.

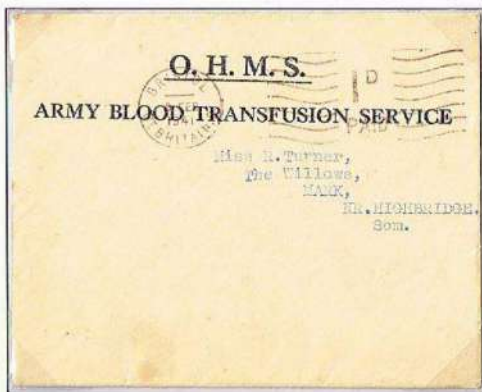
BLOOD TRANSFUSION IN DESERT WARFARE

Broadcast from the Front Lines during the Battle of Alamein by Godfrey Talbot (B.S.C. Observer with the 8th Army).

"I've just come out of a dressing station. It's partly dug in underground. There's been a raid just now. The doctors are doing wonderful work in these places. In one tiny underground cave in this sandy rock, there were four men having blood transfusions. . . . It's one of the many places where life is being done at various parts of the desert front.

"It's no exaggeration to say that blood transfusion on a big scale is one of the biggest and finest medical service developments in this war. It's a thoroughly well-organized business, and it's saving very many lives on the battlefield itself, as well as at base hospitals—lives which would have been lost from lack of blood.

The Army Blood Transfusion Service, advertising booklet with information on its work in the field and appealing for blood donors to use the official paid reply. Scanned pages from within booklet reduced



On His Majesty's Service official envelope from the Army Blood Transfusion Service, official paid postage with a 1d paid cancellation.

France also established an Army Blood Supply Service



During the First World War, Arnault Tzanck was a doctor in a military ambulance unit, where he realized the vital role of blood transfusion. With the outbreak of WW2, he was instrumental in setting up a French Army Blood Service.



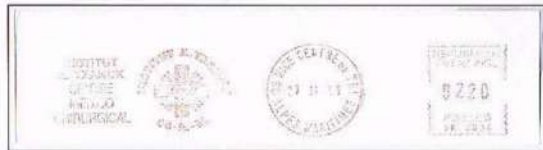
Franchise Militaire (FM) - Postage exempt (reverse not reduced)

Individual Army Units were also set up in areas of conflict, such as the US 6713 Blood Transfusion Unit based in Italy

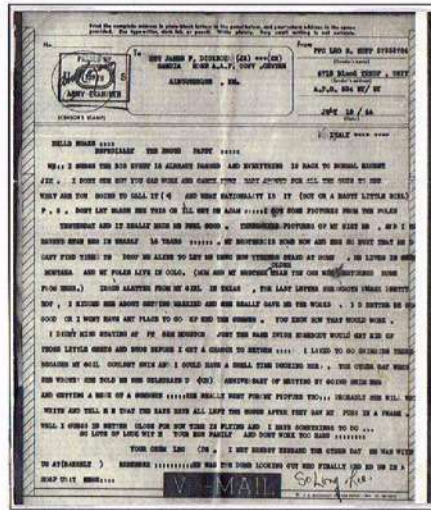
After the war Tzanck was responsible for the organization of blood transfusion services in France that resulted in the establishment of the Centre National de Transfusion Sanguine (National Blood Transfusion Centre) in 1949 with Tzanck as its first director.



Meter: Status



Meter: Neopost/Status



V-mail, or Victory Mail, used by the US based on the British Airgraph system. V-mail letter was on small letter sheet, 17.8 cm by 23.2 cm, censored, photostated and transported as a thin, flat, microfilm image. Upon arrival at their destination the negatives would be printed. The final print was 60% of the original document's size, creating a sheet 10.7 cm by 13.2 cm.

5.2. BLOOD TRANSFUSION SERVICES

World War II

The search for long term storage of plasma

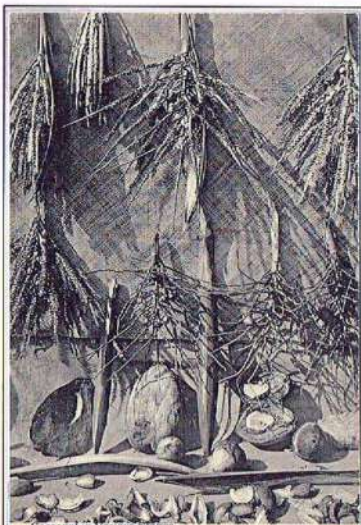
During this time attempts at counteracting the effects of shock from severe trauma were being investigated, blood transfusion was the best method of treatment, but was not always readily available on the battlefield, intravenous infusions of saline were often used,



as well as dextrin infusions



printed to private order postal stationery



Coconut in various stages

It was discovered at this time that coconut water has a chemical composition similar to plasma, and was used straight from the nut to give emergency transfusions to soldiers in the Pacific War when blood wasn't available, however, human plasma is the better alternative...

printed to private order postal stationery



During WWI Richet had investigated the possibility of blood plasma transfusions...



... and in the 1930's Charles Drew had developed the idea of long term storage of plasma, which could be used in the treatment of burns and shock, and at the beginning of WW2 he became the coordinator of the 'Plasma for Britain' campaign



...Charles Best, better known for his role in the discovery of insulin, was instrumental in organising the collection and production of dried plasma for the Canadian military in Europe.

5.2. BLOOD TRANSFUSION SERVICES

A war time stamp that never appeared

As a result of the British and Canadian experience, in the USA a vigorous campaign to attract blood donors for plasma preparation for the armed forces was in force...



Meter: Pitney Bowes CYCYS



Meter: Pitney Bowes CYCYS

... thus in 1944 the US Post Office in conjunction with the military medical authorities planned to issue a 'blood plasma' stamp to bring to the attention of the public the need for blood plasma for the wounded.

The stamp was scheduled to be issued in March 1945, but 3 factors prevented the issue of the stamp:

1. the urgent requirements for the printing of invasion currency and war bonds



2. Although President Roosevelt (a keen philatelist) played no part in the actual design of the proposed stamp, he apparently considered the proposed design 'too horrific' and vetoed the design.

3. The war was almost over.

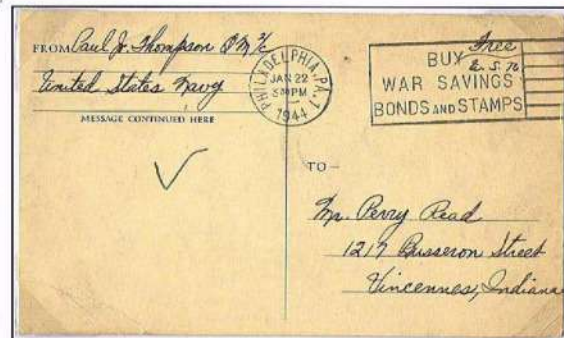


France liberated, 1945

The whole project was thus cancelled.

A single copy of the original proposed stamp design, is held by the Smithsonian National Postal Museum, Washington, DC.

Non-philatelic items were produced such as this FDC. The FDCs printed were used as FDCs for other later stamp issues. This one not used as a FDC but has a Youngblood postmark and an Army and Navy defence postage stamp. Youngblood Post Office, Pike County, Alabama, in operation 1894-1935.



1944 slogan cancellation used on US Armed Services postage free privilege envelope

