

## DONATION OF BLOOD AND BLOOD TRANSFUSION

The discovery of blood flow by William Harvey in 1628 gives us our first postage stamp dealing with blood, circulation of blood, the heart, heart transplants, and cardiac congresses. Argentina and Russia honored William Harvey by a stamp with his portrait. An English physician, Harvey lived from 1578 to 1657.

Blood types were described by an Austrian physician, Karl Landsteiner (1868-1943).. His discovery in 1900 that human blood was made up of different types later allowed use of blood transfusions. Landsteiner was a Nobel prize winner in medicine in 1930 with Austria and German Democratic Republic issuing stamps showing his portrait.

Argentina issued a stamp showing a portrait of Luis Agote, honoring him for his description of the use of citrate blood for transfusion.

Blood transfusion has gradually evolved from syringe-to-syringe method, Kimpton Brown tube, special syringe gadgets, citrated blood and to blood banks. Blood now is stored in blood banks from which it is ordered as to type, RH factor and other special types. Packed red cells are used for transfusions at times. Blood is transported in containers ready for use.

Transfusions are used for many conditions, used during surgery to combat shock and is essential for cardiac surgery. Open-heart surgery would not be possible without machines for extracorporeal circulation and blood transfusions.

Blood was passed from one animal to another in first experimental transfusions as long ago as 1665. Various animal transfusions were tried during the remainder of that century between animals and between animals and men. Yet during the last century, blood transfusions were uncommon and a major surgical procedure.

In this 20th century, transfusions are daily occurrences and are no longer innocuous procedures. Tests must be made of blood and recipient as to type, group, RH and other factors before a transfusion is done. Still, a transfusion may cause a reaction even when all tests are satisfactory..

In September 1969 a case of cross circulation of baboon blood to human was reported with two months' survival. Thus we have gone a complete circle in transfusions.

"Blood is so often lifesaving that organized programs to recruit blood donors and blood donations can be found practically everywhere in the world. In the United States an estimated 5.5 to 6.0 million units of blood are transfused annually.

"The needs for whole blood, plasma and red blood cell suspensions for medical and surgical conditions continue to mount yearly. More uses are being found for blood components and open-heart surgery requires large numbers of donors for its operations.

"Considerations of this sort, conjoined with a mutual interest in philately, have prompted us to look at how stamps have been used to promote blood transfusion in various parts of the world. The long-range purpose of this effort (in addition to satisfying our hobby instincts) was to see whether a constructive program could be stimulated in the United States - a program which would use the great publicity value of commemorative stamps for promoting blood donor recruitment.