

MEDICINE

No Cadaver Blood for U. S.

THE USE of cadaver blood for transfusions may appear to be somewhat ghoulish to some persons, but that would not be the primary reason for its unpopularity in this country, a Chicago surgeon said.

Blood from a dead person can be as good as blood from a living person. However, there would be too many family and legal problems to hurdle on the sides of both the donor and recipient, Dr. Leo M. Zimmerman said in a talk entitled "The History of Blood Transfusions."

Once the person is dead, he pointed out, the remains legally belong to his next of kin, who has the say-so about what happens to the body.

Another disadvantage, he pointed out, is that a large transfusion task force must be roaming at all times ready to speed to the scene of death and draw the blood.

"Can you imagine this in a city the size of Chicago?" he asked.

Also, there is no need for such blood, since American blood banks are well stocked with blood from live professional and volunteer donors. Dr. Zimmerman

said that cadaver blood transfusions were begun by Soviet scientist Serge S. Yudin at the Sklifosovskii Institute in Moscow in 1930. Since then, more than 27,000 such transfusions have been performed there.

The Russians claim as major advantages of this technique the facts that cadaver blood does not clot, or if it does, it quickly liquefies again, and that eight pints can be drawn from one subject, whereas only one pint can be safely taken from a live donor at one time.

However, cadaver blood is non-clotting only when the donor has died suddenly. The Russians eliminate those bodies with open wounds where infection can enter. They do not use blood until a complete autopsy has been performed to be sure the victim had no disease that might be carried in the blood stream.

Blood transfusions date back to the last century when an English obstetrician prevented death from hemorrhage after childbirth by administering the fluid with a quill and crude syringe.

Science News Letter, March 26, 1960

LINGUISTICS

Journal Uses Interlingua

TO PROVIDE the "most compact form of communication feasible in the present linguistic situation," the Journal of the American Medical Association has added each week an Interlingua translation to the summaries of its original articles.

The principal medical journal in America thus joins a score of other medical publications to make it possible, through this international auxiliary language, for those who have an imperfect knowledge of English to have access to new medical knowledge.

"In the medical libraries of the world, the Interlingua summaries will be permanently available for the benefit of those who have an imperfect reading knowledge of English," the Journal states editorially. "Their facility in reading it will vary according to their language backgrounds. Those with a Romance language as their mother tongue will grasp it at first sight. Others in Europe, on both sides of the iron curtain, will do almost as well. So far, few or no factual data are available as to its scope in Russia, but the international technical-scientific vocabulary, which is the backbone of Interlingua, is known to be widely diffused in the Russian language. Any facility in reading Interlingua in the near and far East will depend mainly on a previous study of European language and would therefore not be great.

"However, Interlingua could serve as a bridge from nonoccidental scientific literature. If a medical writer in Moscow, Istanbul, Cairo, Peking, or Tokyo were to present his material in Interlingua or prepare an Interlingua summary, he would speak to the rest of the world with a single

voice so that his contribution would be immediately intelligible to the occidental world."

Interlingua is being introduced into practical use, especially in scientific journals and at international conferences, with the aid of SCIENCE SERVICE. (See p. 196.)

Science News Letter, March 26, 1960

GEOLOGY

Age of Hudson Palisades Set at 190,000,000 Years

THE AGE of the Palisades that line 20 miles of the western shore of the Hudson River in New York and New Jersey has been set at about 190,000,000 years.

The age was determined by Glenn Erickson of Columbia University's Lamont Geochemical Laboratory and reported to the New York Academy of Sciences. Mr. Erickson studied the decay of radioactive potassium to argon in determining that the Palisades originally were forced up through many layers of the earth's crust about 190,000,000 years ago.

Extensive use of radioactive isotopes of uranium, rubidium and potassium in fixing the ages of such rock structures as the Palisades has only been feasible for geochemists for the past three to five years. It is the enormously prolonged radioactive decay of these isotopes into lead, strontium and argon, respectively, that enables scientists to measure rock age directly, rather than do it by inference from fossils and structural formations.

The Palisades belong to the upper or

later triassic period of geological time when dinosaurs roamed this part of the world and when the region from Englewood, N. J., to Nyack, N. Y., resembled the deserts of western Texas.

Science News Letter, March 26, 1960

TECHNOLOGY

Trackless Train Planned To Go 25 Miles Per Hour

A TRACKLESS train consisting of 12 or more individually powered cars has been proposed to travel on highways and roads at a top speed of 25 miles per hour. Once at its destination, the train could be separated and each car driven as an individual vehicle. The Army Transportation Research Command has awarded a \$75,000 contract to Stevens Institute of Technology in Hoboken, N.J., for development of a control system for the train so that one driver can control all cars at once.

Science News Letter, March 26, 1960

MEDICINE

Powerful Clot Dissolver Isolated From Blood

A POWERFUL clot dissolver that occurs naturally in the blood has been isolated by a team of research physiologists.

The extract produced "a spectacular result" as a clot dissolver when in the living bloodstream although it showed no such possibilities when added to blood in test tubes. It has not yet been tried in humans, nor is it presently available in sufficient quantity to permit clinical trials, Dr. Walter H. Seegers, Ricardo H. Landaburu and J. Frederic Johnson of Wayne State University, Detroit, cautions in Science, 131:726, 1960.

Thrombin E, the name given their purified extract, produced no serious side effects when injected into the bloodstreams of dogs. At the same time it proved to be a powerful dissolver of fibrin clots in those bloodstreams.

The thrombin E was extracted from thrombin, a component of the fluid portion of blood necessary for natural blood clotting. It was separated from thrombin C, the active blood clotting ingredient of thrombin.

Science News Letter, March 26, 1960

ARCHAEOLOGY

Tools Found in India From Old Stone-Age?

STONE FLAKES which may be old stone-age tools have been found along the Girna River bank 261 miles northeast of Bombay—the first time found in this area. Dr. C. R. Karnik of Mooljee Jaitha College, Jalgaon, East Khandesh, India, reported his find of the stone tools in Nature, 185:711, 1960. It appears that the river is now eroding ancient beds and underlying rock. Dr. Karnik said he believes a systematic survey of the river valleys by archaeologists might lead to many rich finds.

Science News Letter, March 26, 1960