The bleeding can be controlled, temporarily at least, by two chemicals. One is a blue dye, toluidine blue. The other is a basic protein, protamine sulfate. The protein is also used to make slow-action insulin for diabetics. The protein acts very quickly, stopping the bleeding in three to four minutes. The dye is slower but its effect lasts from three to five times longer.

Science News Letter, March 27, 1948

PHYSIOLOGY-ENGINEERING

Personal Air-Conditioning

Ventilated clothing was found to keep pilots comfortable and reduce the weight consumed by air-conditioning equipment for cabins on planes.

➤ VENTILATED clothing is likely to replace air-conditioned cabins in military aircraft of the future. Successful trials of the ventilated clothing were reported by Drs. E. S. Fetcher, S. I. Rapaport and John F. Hall, of the Aero Medical Laboratory, Wright Field, Ohio, at the meeting of the Federation of American Societies for Experimental Biology in Atlantic City.

Air Force pilots were kept comfortable by their ventilated clothing at temperatures ranging from 30 degrees below zero Fahrenheit to 180 degrees above.

The ventilation was accomplished by piping air through tubing to all parts of the body. The air was kept at temperatures between 50 and 110 degrees Fahrenheit. Coveralls of coated nylon kept it close to the skin. The air was forced through the coveralls at the rate of 55 cubic feet per minute. Regardless of the type of outer clothing worn, the pilots remained comfortable because this wall of air, insulated by the outer clothing, controlled their body temperatures.

Hands and feet were purposely left out of the "ventilating circuit" because previous research had shown that no artificial heating or cooling of them is necessary in the 30 below to 180 above zero temperature range. If the rest of the body is kept warm enough, the scientists explained, the blood passing through the hands and feet will keep them comfortable. Medium-weight gloves and heavy boots were all the men needed to keep their hands and feet warm when wearing their ventilated clothing.

Military personnel other than Air Force pilots, and industrial workers whose jobs subject them to very hot temperatures, might also benefit from the ventilated clothing, the scientists suggested, although so far it is still in the experimental stage.

For the Air Forces, the great saving in weight now consumed by bulky air-conditioning equipment for cabins is an important advantage of the new clothing for personal air-conditioning.

Science News Letter, March 27, 1948

MEDICINE

Feeding Complete Meals By Vein May Be Possible

➤ COMPLETE feeding by vein instead of by mouth may be possible, preliminary studies reported at the meeting of the Federation of American Societies for Experimented Biology in Atlantic City by Drs. H. C. Meng and Smith Freeman of Northwestern University School of Medicine show. While few healthy persons would want to give up the fun of eating their food, very sick persons often are unable to eat. Feeding them by vein is now widely practiced, but they do not get complete meals in this way. Sugar, salt, vitamins and protein building blocks are all they get.

The Northwestern scientists have gone a step farther and added butter fat to the meals by vein. Two dogs fed this way for eight and 10 weeks stayed healthy and kept their weight. A slight anemia developed but did not progress.

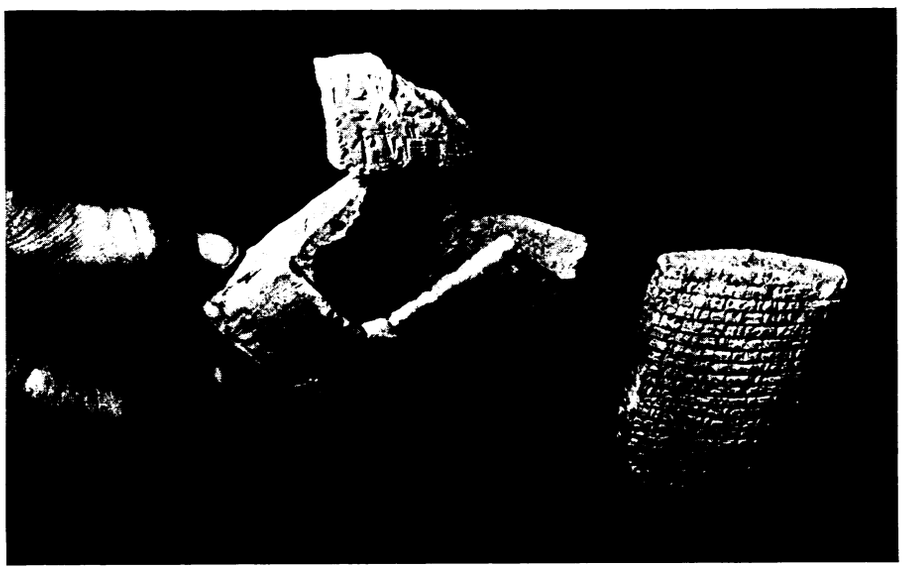
Science News Letter, March 27, 1948

PHYSIOLOGY

You Eat To Keep Warm, New Theory Suggests

➤ HOW much you eat is regulated, not by your stomach or the taste buds in your mouth, but by a tiny pea-sized area at the base of your brain, called the hypothalamus. And this brain area makes you eat more or less according to the temperature. This new theory, suggesting that the urge to eat is an urge to keep warm, was proposed by Dr. John R. Brobeck of Yale University, at the meeting of the Federation of American Societies for Experimental Biology in Atlantic City. The theory is based on research by himself and other scientists. In the latest studies they found that rats eat less and less as the temperature goes up, in an effort to keep from getting too hot.

Science News Letter, March 27, 1948



BABYLONIAN BRICKS—Baking these clay tablets, a new technique developed by Prof. Ferris J. Stephens of Yale University, makes their cuneiform inscriptions more legible. (See SNL, March 20.) Here is shown a clay tablet and the envelope from which it came. The terms of the agreement were imprinted on both so that any changes could easily be detected.