

EXTRACTS FROM BRAIN TISSUES STOP BLEEDING

Dangerous bleeding after surgical or accidental injury to blood vessels may now be stopped by chemical substances derived from brain, lung, blood, or other body tissues. Herbert Hamilton of Detroit described at the recent meeting of the American Chemical Society at Philadelphia how substances of animal origin which cause the blood to coagulate more quickly are made. Extracts may be prepared from any tissues, Mr. Hamilton said, but those from the brains or lungs are the most effective. These substances are to be used by "bleeders", or hemophiliacs, as the doctors call them. They are persons with blood which fails to coagulate quickly enough or which does not form the right kind of clots.

BEST FOOD DYES MADE IN AMERICA

How American chemists had to get busy to maintain the pretty pre-war colors of domestic candies and cake icings with home made dyes during the World War and afterwards, was described at the recent meeting of the American Chemical Society at Philadelphia by W. C. Bainbridge of Brooklyn, N. Y. From 1907 to 1914 food colors were purified from imported crude dyes from Germany but after that time American manufacturers had to produce their own from domestic raw materials, Mr. Bainbridge said.

"The use of coloring matter in foodstuffs is an old established practice which originated in the workshop of Nature " Mr. Bainbridge explained. "Man in his endeavor to meet the culinary requirements of advancing civilization found it necessary to perpetuate the familiar and characteristic hues that suffered deterioration in the process of cooking or preserving. Thus the art of tinting foodstuffs was established.

"At first the juices of such vegetables or fruits that lent themselves readily to extraction and concentration were employed," Mr. Bainbridge said, "Those coloring matters were as a rule easily destroyed and the results were not satisfactory. But the advent of coal tar colors brought the desired permanent shades and hues and these soon found wide use. In 1907 the U.S. Government passed a law making the use of certain of the harmless coal tar colors in food permissible and barring the rest."

The war established a new industry in the United States and a larger variety of truly superior dyes are now being produced here as a result, it is said.

FEMALE SEX GLAND EXTRACT STUDIED

The chemical substance that controls sexual reactions in the female and which was recently first isolated from the ovarian gland has been subjected to many laboratory tests since its discovery and many of the properties and effects of this vital substance have been studied. J. O. Ralls, C.N. Jordan and E.A. Doisy of the St. Louis School of Medicine have succeeded in making a highly pure preparation of the hormone free from cholesterol, a substance present in all body tissues, they told members of the American Chemical Society at its recent meeting.

A chemical analysis of the purified substance showed that it contains carbon, hydrogen, nitrogen, phosphorus and oxygen. As oxidation destroys the power of the extract, a study was made to see whether anti-oxidizing agents would enhance its keeping qualities.

BONE MARROW IS GOOD BLOOD TONIC

The snarling, bone-splitting, marrow-sucking caveman who ate things that modern man's nostrils curl at was at least not anemic. Chauncey Leake of the University of Wisconsin has made a preparation of red bone marrow and dried spleen which he says is an excellent tonic for making good red blood for weak people. His preparation is to be taken by the mouth, Mr. Leake explained to members of the American Chemical Society meeting a few days ago. It does not deteriorate on standing and has no untoward side effect on the patient.

Tests showed, Mr. Leake said, that dried spleen and bone marrow each stimulate red blood cell production but they are most active when they are taken together. When combined in fifty-fifty portions the mixture contains about one-fourth of one per cent. of water-soluble iron. The beneficial properties of the mixture are not destroyed when heated as hot as boiling water.

CHEMIST MAKES NEW SYNTHETIC RESIN

A new resin, made of glycerine and carbolic acid, and used in the making of varnishes, molding powder and other substances, was described before the American Chemical Society meeting recently by James McIntosh, of Bridgeport, Pa., the discoverer. After the glycerine and carbolic acid have been condensed the product can be made into an infusible insoluble substance by a one or two step process. The reaction can be speeded up by the addition of a hardening agent. The new resin is called acrolite.

WOOD AND WEATHER AFFECT WEARING QUALITIES OF PAINTS

Why a coat of paint stays longer on one barn than another or wears better in one place than another has been studied by scientists of the Forest Products Laboratory and other organizations. Frederick L. Browne and Clarence E. Hrubesky of Madison Wis., told members of the American Chemical Society of paint test on fences erected in eleven different places in the United States representing widely varying climatic conditions, eighteen varieties of softwood lumber, and two types of paint.

In the cases of some of the woods both types of paint have survived two years of exposure perfectly, while in other cases one or both kinds of paint failed badly. Some of the fences made of southern yellow pine failed very early, whereas cypress fences did very well in spite of the fact that the wood has a reputation of being a "bad painter". The durability of paint was much greater on edge grain than on flat grain lumber of certain species. Weather conditions have a great effect on paints and caused complete failure in many cases.
