

# Physician Investigates "Blindfold" Test

Medicine

The ease with which college students and other types of American smokers are reported to distinguish between cigaret brands is questioned by Dr. Emil Bogen of Cincinnati. Dr. Bogen told members of the American Medical Association that he gave the now famous "blindfold" test to a mixed group of professional men, university students and laborers, all of whom had been smoking more than three years and used an average of one package of cigarets a day. He found that they could not tell one brand from another, but that they could distinguish between West Indian and Oriental cigarets and between these and the blends and pure domestic brands.

One smoker who recognized the

class consistently was also able to distinguish the brands in some cases, but Dr. Bogen said that he was an exceptional smoker.

Dr. Bogen also investigated various other advertised advantages of different brands of cigarets. He found that one brand advertised widely as toasted had a relatively high percentage of moisture. The moisture content of the cigaret varies with the humidity of the surrounding atmosphere and may be from 8 to 50 per cent. of the weight of the tobacco.

The highest nicotine content was found in domestic cigarets, the lowest in the West Indian brands. Nicotine was not the only injurious agent found in cigaret smoke. Ammonia, carbon monoxide, the heat of the

smoke, and irritating tarry substances are present in quantities sufficient to cause local irritation of the nose, throat and eyes, Dr. Bogen observed.

"Coolness" of the smoke seems to depend more on the rate of smoking than on the brand of cigaret. Different cigarets have the same range of temperature when smoked at the same rate. The temperature of the smoke after passing through the unburned tobacco in half the length of the cigaret is never greater than that of the human body, which is normally 98.8 degrees Fahrenheit. However, when only a quarter of the cigaret is left the smoke may be so hot as to injure the tissues of the mouth and throat.

*Science News-Letter, July 20, 1929*

## Medical Advances Shown

Medicine

Medicine's advances during the past year were graphically portrayed in exhibits before the American Medical Association's annual meeting at Portland, Oregon, last week.

The conquest of anemia by feeding liver extracts, new ways of feeding babies, additional hopeful reports of hitherto hopeless paresis being subdued by malarial fever, the rise of hydrogen sulphide gas as an industrial menace, a newer, speedier way of diagnosing cancer—these and many other achievements were shown.

Hydrogen sulphide, familiar to the practical joker of school chemistry classes as the gas with the rotten-egg odor, is causing concern and developing into a menace to life due to the greatly increased production of high sulphur crude petroleum. When the sulphur is taken out of the crude oil it is sometimes allowed to escape as hydrogen sulphide, which is poisonous in addition to its bad smell. Deaths have been caused in this way and the U. S. Bureau of Mines in its exhibit is warning physicians of this new danger to human life.

Babies do not get enough vitamin B, Dr. Roger H. Dennett, of the New York Post-Graduate Medical School and Hospital, has found. Wheat germ sugar added to the usual infant diet supplies this lack.

When the unruly growths or diseased organs are removed surgically from the body, surgeons are always desirous of knowing whether they show cancerous traits likely to spread

to other parts of the body. So Dr. Benjamin T. Terry of Rochester, Minn., has developed a special microscopical examination for speedy determination of malignancy which he taught to physicians at the meeting.

Eating liver has been proved to be an effective way of renewing the red blood cells that are depleted by anemia and now several commercial laboratories are supplying concentrated liver extract so that the patients will not be forced to eat large quantities of liver for their health's sake.

Sieved baby food already canned and prepared to save mother the trouble and orange juice bottled without preservatives, artificial color, or dilution were other new food preparations shown.

For the physician who wishes to travel light but prepared there is an emergency hypodermic kit no larger than a fountain pen. The progressive surgeon can now have chromium finished instruments. And a recent drug useful in treating colds because it dries up the nose and throat is ephedrine. For the remedy of erysipelas there has been devised an antitoxin that is now commercially available.

Such are a few of the new tools and materials given the practicing physician by cooperating colleagues and aids.

*Science News-Letter, July 20, 1929*

Paper board made from wheat straw is said to be highly resistant to fire.

## New X-Ray Menace

Physiology

X-ray therapy, one of the blessings of modern science, can, in exceptional cases, produce feeble-mindedness and deformity in human beings. This possibility has been discovered through investigations by Dr. Douglas P. Murphy of the University of Pennsylvania. He emphasizes, however, that the danger is limited to treatment with X-rays, which does not include the taking of an ordinary X-ray picture.

Mothers shortly before the birth of their children are sometimes treated with X-ray irradiation for malignant growths. If the growing child is subjected to the irradiation from the X-ray machine at the same time that the therapeutic measures are undertaken, it has been determined that there is about one out of three chances that it will be feeble-minded. Malformations of the head and dwarfing of the limbs may occur under such conditions. Dr. Murphy has studied over a hundred instances of X-ray treatments under such conditions and he found that serious results had followed in one-third of the cases.

There is no danger in an ordinary X-ray picture if it is taken of the mother before the birth of her child. Neither has Dr. Murphy been able to discover any injurious effects upon subsequent children from X-ray treatments that were given before pregnancy.

*Science News-Letter, July 20, 1929*