

## MEDICINE

## View Gall Bladders With Iodine Chemical

► A NEW chemical for making gall bladders visible in X-ray pictures has been giving good results in preliminary trials at the Johns Hopkins Hospital, Baltimore, Md.

The compound contains about 67% by weight of iodine and like others used for this purpose, it is taken by mouth.

When tried on 100 patients, it enabled the doctor to see the gall bladder in 93. It was 35% more opaque than other materials used heretofore.

"This constitutes an improvement of considerable significance," Drs. Russell H. Morgan and Hal B. Stewart state in their report to fellow radiologists through the technical journal, *RADIOLOGY*.

The compound will be marketed under the trade name, Telepaque, by Winthrop-Stearns Company.

Less nausea or other distress and far less need for a second dose to get satisfactory X-ray views of the gall bladder are other advantages for the drug found by the Johns Hopkins doctors.

Science News Letter, March 22, 1952

## HORTICULTURE

## New Garden Lettuce and Cockscomb Seeds Available

► NEW GARDEN lettuce, loose-leaf and heat-resisting, is the most promising lettuce developed to date. Seeds of this Salad Bowl Lettuce, the first lettuce ever to win the All-America Selections' gold medal, are now available.

Seed of Mandarin Chinese cabbage, the first domestic dwarf type of Chinese cabbage, and Celosia Pampas Plume, a tall feathered cockscomb with a large, luxurious plumed spike, are also available this spring for the first time. Dianthus Double Gaiety with frilled and twisted petals is considered by some the finest pink available today.

These two vegetables and flowers are plants your neighbors are not likely to have. All contained in the 1952 seed kit, they can be secured through SCIENCE SERVICE.

Salad Bowl lettuce, developed by the U. S. Department of Agriculture, has a dozen well-known ancestors. Some belong to the head variety of lettuce, some are loose leaf and a few are Romaine or Cos.

Ancestors grown in home gardens today are New York, which often weighs two pounds; Iceberg, which produces a small, tight head; Grand Rapids and Paris White. Slobolt gives the new lettuce its great ability to withstand heat. A California variety known as Australian contributed the peculiar leaf formation, making the lettuce resemble endive.

Mandarin Chinese cabbage is the first dwarf variety to be developed especially

for U. S. soil and climate. Tasting like a cross between cabbage and lettuce, this garden green makes delicious coleslaw, can be cooked like asparagus and is a novel base for salad late in the season after fresh lettuce is no longer available.

The lovely new plumed cockscomb being introduced this year likes the hottest possible weather. The plant makes an attractive border for the garden and the flowers keep beautifully when cut. A brand new variety for 1952, Celosia Pampas Plume comes in a colorful collection of coppers, bronzes, reds and golds.

*Seeds of the Salad Bowl lettuce, Mandarin Chinese cabbage, Celosia Pampas Plume and Dianthus Double Gaiety have been collected for you by Science Service. These four are available for the nominal sum of 75 cents in the current unit of monthly "THINGS of science" service. Grow them yourself to see how excellent they are. Just write Science Service, 1719 N St., N. W., Washington 6, D. C., and ask for the 1952 seed kit.*

Science News Letter, March 22, 1952

## NUTRITION

## Sorbitol Ice Cream Tried for Diabetics

► BETTER TASTING ice cream for diabetics may result from a mix made with sorbitol, a sweet tasting food alcohol. The mix was developed at the University of California College of Agriculture at Davis under the direction of dairy industry specialist B. E. Hubbell, Jr.

The problem in making ice cream for diabetics has been to remove the sugar solids without changing the freezing point of the ice cream. Sorbitol, besides lending sweetening to the ice cream, lowers the freezing point of the mix so that a normal body and texture of ice cream results. The chemical, though sweet, is not readily used as a sugar in the body.

The university's diabetic ice cream mix has now been released in small quantities for test purposes to some local manufacturers.

Science News Letter, March 22, 1952

## TECHNOLOGY

## Switch to Bottled Gas When Pressure Drops

► A DUAL-FUEL heating system designed to keep houses and office buildings warm when the gas pressure drops has been developed, tested and found satisfactory, the Gas Appliance Manufacturers Association announced in New York.

An outdoor thermostat automatically switches the heating system from natural to bottled gas when the temperature falls below a specified point. That helps keep the gas pressure up in utility mains during cold snaps when gas demand is high.

Science News Letter, March 22, 1952

# IN SCIEN

## PSYCHOLOGY

## Off-Center Words Easier To Recognize, Tests Show

► YOU CAN recognize an English word that you are not looking directly at better if it is off to the right than if it appears in some other direction.

Readers of Yiddish, on the other hand, recognize off-center words if they are off to the left.

This was revealed by experiments at McGill University, Montreal, Can. The explanation is suggested by the experimenters, Drs. Mortimer Mishin and Donald G. Forgays in the *JOURNAL OF EXPERIMENTAL PSYCHOLOGY* (Jan.).

When you are reading English, the center of your eye is fixed on one word, but meantime the tail of your eye is constantly looking ahead to the word next on the right. This gives special training in recognition to visual cells on the right of the eye's retina and corresponding training to the left side of the brain.

In reading Yiddish, which is read from right to left, it is the left side of the eye which gets the special training and the right side of the brain.

Other possible explanations were ruled out by further experiments. Among them were suggestions that the first part of the word is more important in recognition and the beginning of a word appearing from the right is closer to the center of the eye than the beginning of a word on the left.

Science News Letter, March 22, 1952

## PLANT PATHOLOGY

## Insecticide, Aldrin, Hits Underground Plant Pests

► HIGHER YIELDS of certain food crops were predicted in Washington through use of the insecticide, aldrin. This new organic insecticide hits insects that infest the soil. It has just been certified by the U. S. Department of Agriculture for shipment in interstate commerce for specified uses.

Control of soil insects, whose damage is not easily spotted, is one of the most promising fields for agricultural progress, F. W. Hatch of Shell Chemical Corporation in New York explained at a press conference in Washington. The crops on which aldrin can now be used include peanuts, sugar beets, sugar cane and small grains. The insecticide kills rootworms, wireworms and white-grubs with smaller dosages than previously known treatments, thus saving money for the farmer and ultimately for the consumer.

Science News Letter, March 22, 1952

# CE FIELDS

## NATURAL RESOURCES

### Sugar Wastes Stop Weeds Stealing Irrigation Water

► WASTE PRODUCTS from cane sugar refineries and potato-processing factories soon may be used to cut down an annual \$500,000 water bill run up for taxpayers by weeds growing next to western irrigation canals.

Announced by Dr. V. P. Sokoloff, a lecturer in geography at Johns Hopkins University, Baltimore, Md., the process uses a mixture of carbohydrates and nitrates to smother weed seeds before they start growing. Dr. Sokoloff, who developed the technique, said laboratory tests have been satisfactory. He predicted the solution would be useful when dirt banks are being packed just before concrete is poured on the walls of the new canals.

Although the process has not been tested in the field, Dr. Sokoloff said it should allow canal walls to be made much thinner because weed roots would not be there to thread their way through the concrete. Those roots, he estimated, absorb annually an amount of water valued at \$500,000.

Science News Letter, March 22, 1952

## PSYCHOLOGY

### Less Conflict With Less Belief in Equal Opportunity

► THE NEGRO or Jew who has faith in the "American Dream" of equal opportunity for all is worse off psychologically than those brought up to believe that they belong in a lower class.

This conclusion was reached by Dr. Gerhart Saenger, psychologist of New York University, after a study of a cross section of New York population.

"The stronger the belief of the minority in democratic ideals," he found, "and the more they tend to reject the belief in their own inferiority, the greater the amount of conflict engendered."

To maintain faith in equal opportunity in spite of the fact that actually they have fewer chances is a failure to face reality.

The way a minority group member behaves as a result of the discrimination against him depends on the extent and the severity of the discriminatory practices. Where discrimination is relatively light, he is likely to try to overcome it; he works harder, is more aggressive, more likely to protest. Where discrimination is more severe, the victim is likely to become resigned and apathetic and to lose ambition.

Race and religious or cultural prejudice is a vicious cycle, Dr. Saenger observed.

Discrimination makes the victim aggressive and self-seeking. Belief that minority members are aggressive leads to hostility by the majority that creates more aggression. If the victim is unable to retaliate, he takes it out on other groups, other members of his own group, or in hostility against himself.

Belief that the Negro is lazy and unintelligent makes the white man refuse him good jobs and educational opportunities. This in turn, makes the Negro lose ambition. He feels it is not worth while to study in school or to work hard.

Dr. Saenger reported his study to the New York Academy of Sciences.

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## DENTISTRY

### Instrument Holds Rat Still and Mouth Open

► SODIUM FLUORIDE, the chemical many communities are adding to their drinking water supply to help prevent tooth decay, will stop cavities that have already started when put on the cavities in the teeth of experimental animals.

This was discovered with the aid of a new instrument devised by Dr. Erling Jehnansen, fellow in dentistry at the University of Rochester School of Medicine and Dentistry, Rochester, N. Y.

The instrument, expected to open an entirely new field of dental research, has not yet been given a name. It makes possible microscopic examination and photography of the tiny teeth and other parts of live, unanesthetized animals such as rats, guinea pigs and hamsters. The instrument holds the animal still and holds its mouth open as it rests in the dentist's hand. It does not cause any pain to the animal, but its manipulation requires the development of a technique by its user. It is simple and inexpensive.

Science News Letter, March 22, 1952

## PSYCHOLOGY

### Childhood Memorizing Lasts Into Old Age Forgetfulness

► MATERIAL THOROUGHLY memorized in childhood is retained when the individual has reached the age of "forgetfulness." This was found by Dr. Madorah E. Smith, psychologist of Honolulu, when she heard a woman of 60 repeat the answers to the 107 questions of the Westminster Shorter Catechism.

The test was made more than 40 years after the woman had ceased to have even incidental practice. She repeated 53 answers perfectly and 39 more with only a word or two of prompting. This was only slightly less than she remembered at a previous test 16 years ago at the age of 44. Then she repeated 54 answers perfectly and 44 with very little prompting. Details of the study are reported in the JOURNAL OF GENETIC PSYCHOLOGY (Dec., 1951).

Science News Letter, March 22, 1952

## TECHNOLOGY

### Springy New Foam Resists Flame, Chemicals

► A SPRINGY new foam that resembles foam rubber, but resists flame and chemicals, has been produced by a new and economical method. It cures at low temperatures and costs about the same as foam rubber in fabricated form.

First the liquid destined to become a plastic is poured into a pressure cylinder. Gas under the low pressure of about 400 pounds expands it four to eight times its original size. The foamed liquid, which now looks like thick whipped cream, is poured into lightweight, open molds, where it settles evenly into every mold cavity. It is cured at 225 to 275 degrees Fahrenheit, available in an ordinary oven.

The springy foam makes an excellent cushion backing for furniture upholstery as it can be laminated to natural and synthetic fiber textiles, or plastic film and sheeting. It is easily molded into intricate shapes, and can be die cut to any shape or sliced as thin as 1/32 of an inch.

The new foam is a type of vinyl resin. The economical new method for producing it was developed by Dr. Edmund H. Schwencke of Elastomer Chemical Corporation, Nutley, N. J., together with Bakelite Company.

Science News Letter, March 22, 1952

## INVENTION

### Atomic Pile Simulated By Electrical Device

► SOME OF the response characteristics of an atomic pile have been electrically simulated in an invention which received patent number 2,587,919. The inventors are Henry A. Straus, Baltimore, and Persa R. Bell, Jr., and Forrest H. Murray, Oak Ridge, Tenn. They assigned their patent to the Atomic Energy Commission.

The most difficult and critical problem in operating a neutron reactor, or pile, the inventors said, is that of controlling the power level or neutron density so it does not grow to dangerous proportions.

In order to do this, the inventors have made an electrical device which has the same time-dependent response characteristics as a reactor. The voltage in the device varies with time in exactly the same manner as does the neutron density of a reactor. The device, the inventors claim, can be used for establishing procedures for start-up, shut-down and operation of a reactor, for training, for design and testing of servo systems, for studies of response of the reactor to unusual disturbances and for obtaining information as to power levels which would be attained should the reactor get out of control of the normal control equipment and be shut down by the emergency controls.

Science News Letter, March 22, 1952