

SOCIOLOGY

Defective Children Not Naughtier Than Others

THE POPULAR impression that children with defective minds are more inclined to naughtiness and behavior problems is false, Clara Burrow, head teacher of the State Street Binet School, Newark, N. J., reported to the American Association for the Study of the Feeble-minded.

"There are bad people with low mentality, and good people with low mentality," she said.

If the teacher in a special school for defective children faces more behavior problems than her colleagues in the general school, it is because of the faulty training her charges have received before being placed in the special school. Placing such handicapped children in classes with those of superior minds is harmful, she told the meeting. But early recognition and special training will prevent later delinquency.

"They have faced failure, ridicule, and reprimands so often that they have become sullen, indifferent, or aggressive in an attempt to counteract the boredom and inferiority that they feel," she said. "If a child's mental limitations are recognized early, and he is placed with his peers, and with teachers who can give him sympathetic understanding and guidance, his problem of mental deficiency becomes somewhat less serious. There are jobs requiring only a minimum of intelligence. Streets must be swept, floors must be scrubbed, dishes must be washed. There are factory operations that these boys and girls can do, provided they have been trained in certain desirable habits, simple skills, and attitudes. This the special school aims to do."

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PHYSIOLOGY

Indians Less "Taste-Blind" Than Paleface Neighbors

INDIANS are less "taste-blind" than their paleface neighbors. This has been discovered by tests conducted on Indians attending the Haskell Institute at Lawrence, Kansas, by Philip Levine and Arthur S. Anderson.

The two investigators used phenylthio-carbamide, the substance which Dr. A. L. Fox, chemist at the Du Pont laboratories in Wilmington, Del., discovered to be exceedingly bitter to about two-thirds of all persons tested,

and quite tasteless to the rest. The great majority of persons tested by Dr. Fox and other investigators have been Caucasians. When Mr. Levine and Mr. Anderson tried it on the Indians they found only about six per cent. out of a group of 183 could not taste it. Among Indians with some white blood in their veins the proportion of non-tasters was considerably higher; 10.4 per cent.

The two investigators also found, among their tests of the white population of Lawrence, two families that seem to break the rule which was thought to have been established: that if both parents are non-tasters, all of their children will be "taste-blind" also. One of these "taste-blind" couples had six children, all but one of whom found the substance bitter. One of the parents could get a little taste out of it, though he called it "a little sour" instead of bitter. In the other family, the father could detect a very slight bitter taste; the mother none at all. Four of their six children were non-tasters, but the other two found the test substance bitter.

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PSYCHIATRY

Four Per Cent. of Primary Children Mentally Deficient

AS MANY as four per cent. of primary school children are mentally deficient, and some careful surveys report as high as eight or even ten per cent. so subnormal as to require education outside the regular classrooms of the public schools, Dr. Edgar A. Doll, director of research of the Training School at Vineland, N. J., told the meeting of the American Association for the Study of the Feeble-minded.

Of these, fewer than ten per cent. are cared for in institutions—nine out of ten of the feeble-minded children are at large in the community.

"We know today that a person must be something more than feeble-minded to require institutional care," Dr. Doll said. "He must be feeble-minded and helpless, or feeble-minded and dependent, or feeble-minded and anti-social, and so on."

Most feeble-minded children live in their homes and are probably going to public schools, and since very few children are cared for in special classes, about 80 per cent. of the feeble-minded of school age are found in the regular classes. The real problem of their training, is, therefore, a community and a public school problem, Dr. Doll pointed out.

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IN SCIEN

MEDICINE

Spicy Diet Probably Not Cause of Stomach Cancer

A SPICY, highly seasoned diet probably does not influence the development of cancer of the stomach, although statements to that effect have frequently been made, Drs. Warren G. Harding, 2d and Franklyn D. Hankins of the Los Angeles County General Hospital conclude in a report published in the *American Journal of Cancer*.

These investigators made post-mortem observations of 158 patients who died of cancer of the stomach, paying particular attention to Mexican patients. If spices and condiments were a significant factor in the development of stomach cancer, the condition should occur rather frequently in Mexicans, the physicians argued, because the diet of these people has been fittingly described as "a little food mixed with pepper and spices." But they found that in Mexicans cancer did not occur any oftener in the stomach than elsewhere in the body.

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BOTANY

No Fool-Proof Rule to Detect Poisonous Mushrooms

THE PUBLIC'S desire for a fool-proof rule by which to distinguish an edible mushroom from a poisonous one is doomed to unfulfillment, says Dr. Fred J. Seaver, curator of the New York Botanical Garden.

"There is no such rule," he stated. "One must learn to know the mushrooms and to distinguish them as you would your friends from your enemies."

Dr. Seaver said that to the mycologist, or student of fungi, there was no significance in terms "toadstool" and "mushroom."

"A mushroom is an edible toadstool or a toadstool is a poisonous mushroom, whichever way one may wish to put it."

With the aid of colored lantern slides, Dr. Seaver gives amateurs an introduction to the fungi, the group of plants to which mushrooms belong.

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CE FIELDS

ENTOMOLOGY

Japanese Beetle Withstands Scientist's Unique Attack

A CAMPAIGN along new lines has been conducted against the destructive Japanese beetle by government entomologists in Washington but first results published indicate that the insect is the victor.

Hoping to find a way to put an end to the ravages of the beetle, the entomologists prepared extracts from plants which were known to be immune to the beetle's attack. These, they hoped, would have a repellent effect on the insect when applied to such trees as apple and peach and would prevent it from skeletonizing the leaves and gouging out the fruit. A repellent for use on corn was also hoped for.

During the three years in which the campaign was conducted, 474 extracts, representing 390 plant species, were tested. Of these only 56 showed any indication of repellency. Twenty-two extracts, made from such plants as holly, goldenrod, and mayapple, were found to have a repellent effect on small peach and apple trees, and were the only ones regarded by the entomologists as justifying further study.

In view of the fact that extracts have been made from the more abundant and important immune plants, the entomologists expressed doubt that a continuation of the campaign would result in the discovery of a practical repellent for the Japanese beetle.

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PHYSIOLOGY

Bananas Prescribed for Childhood Disorder

BANANAS, once denied a place in the child's diet because they were "too hard to digest," now not only have won a place in the normal child's diet but are being especially prescribed in the treatment of a digestive disorder of children, it appears from a report of Dr. Sidney V. Haas of New York to the American Medical Association.

Dr. Haas recommended bananas as an essential in the diet for "celiac dis-

ease" and said they can be used in almost any quantity.

This digestive disease, formerly known as chronic intestinal indigestion, is characterized by a lack of muscle tone and marked distention of the abdomen. The little patients are extremely irritable, have no appetite and do not grow properly. Furthermore they cannot tolerate carbohydrates, which include all starches and sugars.

Dr. Haas reported, however, that the carbohydrate in bananas is perfectly tolerated. The banana contains ferments which can break up starches and convert cane sugar into fruit sugar, which is a more easily utilized form, he explained. Bananas also contain all the vitamins except D.

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ECOLOGY

Ohio Bogs Yield Story Of Climates Long Ago

POLLEN GRAINS, buried in the peaty muck of ancient bogs in northern Ohio, have revealed, under the microscope of Prof. Paul B. Sears of the University of Oklahoma, the story of midwestern climate since the end of the Ice Age. A similar study of pollen, made in Iowa by George H. Lane, gives backing to Prof. Sears' findings.

The peat samples were obtained by boring down into the soil of the bogs with a hollow instrument. From the core brought up samples were taken every six inches, and the number and proportions of the various species of pollen grains in them were determined.

Combining the samples from two bogs showed that the first forest was of spruce and fir, indicating cool humid conditions. After this pine replaced the fir, indicating cool but dry conditions.

Next came a shift to hardwood trees, suggesting greater warmth. Beech pollen was most abundant at the beginning of these conditions soon being replaced by hickory, which has been predominant until recently. From this it is inferred that the warmer part of post-glacial climate has been largely too dry to favor the beech in Ohio.

Prof. Sears' study backed by that of Mr. Lane, supports the view that post-glacial climate in North America has been largely dryer than the present. Instead of one warm dry period, however, there appears to have been an earlier cool dry (pine) period and a later warm dry (oak-hickory) period, separated by a perhaps more humid (beech) climate.

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ASTRONOMY

Kopff's Comet Sighted By Argentine Astronomer

KOPFF'S COMET, a periodic visitor to the earth's part of the solar system, has returned after a six-and-a-half year absence. It was sighted before sunrise on Wednesday, May 25, by Dr. Bobone of Cordoba Observatory in Argentina. News of its rediscovery was flashed to Science Service through Harvard College Observatory at Cambridge, Mass., American clearing-house for astronomical news.

As seen by Dr. Bobone, it was of the twelfth magnitude, far too faint to be visible to the naked eye, and lacked any tail. It was below the celestial equator, an imaginary line through the sky directly above the earth's equator, and lay a little to the south of the zodiacal constellation Libra, the Scales. In the astronomical equivalent of latitude and longitude, the position was: declination minus 26 degrees, 11 minutes, 12 seconds; right ascension 15 hours, 11 minutes, 18.8 seconds.

Dr. Bobone is a well-known comet finder; it was only a few weeks ago—April 18—that he reported the rediscovery of Houghton's comet.

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ENGINEERING

Generator Load Divided For Better Operation

See Front Cover

WITHOUT the pretty girl, this massive stationary winding of a turbine electric generator might appear to be the size of a spool of thread. But contrast emphasizes the machine's 83,300 kilovolt-ampere capacity.

The black arms are heavily insulated butt-ends of copper bars in which electricity is to be generated. They are sunk in grooves in the inner surface of the stator frame.

Within the core of the stator, where the young lady is seated, the energized rotor will spin at 1800 revolutions per minute. Current it induces in the stator is to be used for all types of industrial, municipal and domestic service.

Double stator windings are an unusual feature of this machine. If half the generator's load should fail, the other half will carry on and thus help maintain stability. The Westinghouse Company, manufacturers, say this is the biggest machine of its kind ever built with internal blowers.

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