

GENERAL SCIENCE

Hidden Talent in Misfits

► A WAY to salvage precious human talent and to solve the problem of manpower shortage in the ranks of professional men and scientists was proposed by Prof. Donald G. Paterson of the University of Minnesota, in the Walter Van Dyke Bingham lecture at Ohio State University.

We should not only look among high school students of unusual talent for those capable of making scientists of the future, Prof. Paterson suggested, but also search among the street-corner pencil salesmen, elderly persons, crippled, and members of minority groups.

Among occupational misfits and "failures" are to be found many who have been misdirected and gotten into an endless circle of misplacement and failure, unemployment and more misdirection.

As an example, Prof. Paterson cited the case of a man who had drifted from one odd job to another, washing windows, farm labor, house painting and so on, believing himself a failure.

When he was tested, it was revealed that he had exceptional intelligence although he was "very retiring."

On the strength of the tests and his record in high school, the man was urged to attend the University of Minnesota. There

he graduated magna cum laude and was made a member of Phi Beta Kappa, honor fraternity. Later he earned an M.A. and a Ph.D. Since then, he has made steady academic progress and is on the faculty of a Midwestern state university.

Another example was a man of 55 who had lost both legs. He had been on and off relief rolls for 30 years and was selling shoe laces and pencils on street corners. Tests showed he had superior intelligence and unusual mechanical ability. He was placed in a machine shop with an on-the-job training program, where he worked a 60-hour week, did well and enjoyed it.

Vocational counseling should be provided and improved, Prof. Paterson urged. Otherwise our very efforts to remedy current manpower shortages may result in the tragic misplacement of individuals who have no particular scientific or technical talents.

Prof. Paterson pointed to the error of a widespread practice in business and industry of having separate employment departments in a given company for hiring factory workers, clerical workers and salesmen.

This practice is based on the mistaken assumption that applicants can and do correctly classify themselves.

Science News Letter, April 28, 1956

VITAL STATISTICS

Chances of Twins

► THE CHANCES of having twins, triplets or even quintuplets are determined by race, age and the number of children the mother has already had.

Women under 20 have twins at the rate of six per 1,000 live births, while women aged 35 to 39 have twins at a rate of about 17 per 1,000 live births. After 39 the rate starts to decline and, for women over 45, it is only seven per 1,000 live births.

In *GP* (April), published monthly by the American Academy of General Practice, Dr. Alan F. Guttmacher says statistics show the greatest frequency in multiple births occurs among Negroes, the lowest among Mongols.

Incidence of quadruplets among whites in the United States is once in 570,196 and among Negroes once in 237,897. Triplets in whites occur once in 9,828 births and in Negroes, once in 5,631. Twins showed a similar affinity for the colored, occurring once in 92.4 white births and once in 73.8 Negro births.

Women who have already had children are more susceptible to multiple births, Dr. Guttmacher points out. In the 35 to 39 age group, which has the maximum twinning incidence, he finds that mothers in their first pregnancy produce 13.6 twins per 1,000 births, while women of the same age group with their seventh pregnancy

have a likelihood of 21.9 twins per 1,000 births.

Six is the greatest number of babies delivered at one time, despite extravagant claims to the contrary, he declares. In none of the several proved cases of sextuplets has any single member survived more than 24 hours.

Quintuplets are not uncommon, however.

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ENTOMOLOGY

Balanced Diet For Insects

► INSECTS need vitamins, studies by two entomologists who raised onion maggot larvae on controlled diets have shown.

The maggots were found to need vitamin B-12, niacin, riboflavin, thiamine and folic acid, as people do. The research showed the insects also need biotin, pantothenic acid, choline and pyridoxine.

The insects were raised in a germ-free environment by Dr. W. G. Friend, Ottawa entomologist, and Dr. R. L. Patton of Cornell University, who report in the *Canadian Journal of Zoology* (April) that a lack of necessary vitamins retards the insects' development.

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• RADIO

Saturday, May 5, 1956, 2:05-2:15 p.m., EDT
"Adventures in Science" with Watson Davis, director of Science Service, over the CBS Radio Network. Check your local CBS station.

Finalists of the Seventh National Science Fair will describe their projects, speaking from Fresno, Calif.; Worcester, Mass.; Miami, Fla.; Butte, Mont.; Allentown, Pa.

VITAL STATISTICS

U.S. Birth Rate May Decline

► THE NATION'S high birth rate may decline for a few years, P. K. Whelpton, director of the Scripps Foundation for Research in Population Problems at Miami University, Oxford, Ohio, predicted.

If the high postwar birth rate is to continue, Mr. Whelpton reported, it will either be because the present tendency to marry and have two or three children while young continues to spread fairly rapidly, or because there is a substantial rise in the number of families with four to six children.

"If neither of these happens," Mr. Whelpton forecast, "the birth rate will resume its former decline for a few years at least."

During the ten years from 1945 to 1955, the Foundation's studies showed, American women have been marrying earlier and have been becoming mothers at a younger age than in the preceding generations.

During these same years, the number of childless families has been decreasing, while the number of two- and three-children families has been increasing.

The studies also show, Mr. Whelpton said, that the four-children families showed small gains, but those with six or more children became less common.

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CARDIOLOGY

Produce Heart Damage By Cold for First Time

► DAMAGE to the heart's blood vessels by exposure to cold has been produced for the first time in more than half of a group of normal laboratory rats fed a normal diet.

The animals developed fatty deposits in the heart blood vessels when kept for 10 to 18 months at freezing temperatures, Drs. E. A. Sellers and Rosemary W. You of the University of Toronto report.

The growing interest in hypothermia, or so-called frozen sleep, for surgical operations, and in injuries produced by cold and in acclimatization to low temperatures led the Toronto scientists to their research.

Fatty heart arteries were produced in rats in six weeks of cold when fed a high-fat, high-cholesterol diet with choline. Hearts in such rats were also damaged when not fed choline.

Further experiments along these lines may be "profitable," the scientists state in the *British Medical Journal* (April 14).

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