

## Mental Giants of History

Giving 301 of the geniuses of history an intelligence test is the latest feat of psychologists at Stanford University. The test was given to John Milton, Michelangelo, Napoleon, Samuel Johnson, and 297 other famous men and women born between the years 1450 and 1850. Results of the investigation have just been published by Dr. Catherine M. Cox, who was assisted by Dr. Lewis M. Terman, Lela Gillan and Ruth Livesay.

Historical records showing childhood traits and mental talents of the geniuses were used as a basis for giving out the intelligence ratings. John Stuart Mill, celebrated English philosopher and economist, was awarded the highest rank of all the 301 famous children. His intelligence quotient was placed at 190, which is 90 points higher than average mentality. At six years of age Mill wrote a history of Rome, and at eight he gave Latin lessons and was held responsible for the errors of his pupil.

Three children were given intelligence ratings of 185, Dr. Cox reports. These were Goethe, famous German poet; Grotius, who became a Dutch theologian, and Leibnitz, who won fame as a mathematician. Napoleon and Beethoven got ratings of 135 on their childhood mentality. Byron was given 150. Michelangelo got 145; Lincoln, 125; Mme. de Stael, 155; John Q. Adams, 165; Coleridge, 175; Washington, 125; Raphael, 110.

Dr. Cox explains that there was a tendency for characters whose childhood has been reported more fully by historians to get higher ratings, because full accounts brought out more evidences of precocity. The ratings are in many cases far too low, she says.

The investigation was conducted to shed light on the early mental traits of geniuses. Dr. Cox finds that generally eminent men and women show signs of superior mentality in early childhood.

"We are probably warranted in expecting superior adult achievement wherever in childhood the Intelligence Quotient is above 150," she states. "But we may not be warranted in expecting a world genius even if the 200 IQ is reached; for there are other factors involved in achieving greatness besides an essential degree of intellectual capacity."

Besides showing early signs of mental brilliance most of the 301 geniuses studied displayed strong character traits, particularly a persistence in following up a line that in-

terested them. Favorable heredity and environment make up the third important factor in the development of genius, according to the results of the investigation. Over three-fourths of the famous characters came from families of a good class, and there are many records of parents and associates giving them unusual opportunities for developing their creative gifts.

"The significant conclusion in the present study," Dr. Cox reports, "is derived from the evidence it presents that the extraordinary genius who achieves the highest eminence is also the gifted individual whom intelligence tests may discover in childhood."

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## MEDICINE

### Cause of Measles

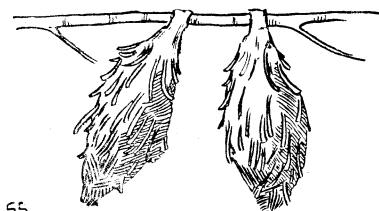
The cause of measles has been discovered, provided researches reported by Dr. N. S. Ferry of the Medical Research Laboratory of Parke, Davis & Company, Detroit, are substantiated by other investigators. The culprit is a streptococcus that is of medium size, grows in chains, and produces small germ colonies with green halos around them. Dr. Ferry has named it streptococcus morbilli. Using this germ, Dr. Ferry has made an antitoxin which when injected into the patient early enough in the course of the disease has prevented the appearance of the rash. This antitoxin, which is similar to that of diphtheria, has been found to protect against measles when injected into susceptible individuals. The measles toxin Dr. Ferry has made can be used to distinguish between those susceptible to measles in a procedure analogous to the Schick test for diphtheria, according to his claims. Dr. W. H. Park, veteran bacteriologist of New York City Department of Health who has been working with Dr. Ferry's germ and also that reported as associated with measles by Dr. Ruth Tunnicliff of John McCormick Institute, Chicago, indicated that more research will be needed before conflicts in evidence in various laboratories and clinics can be ironed off.

At present the most hopeful method of combating measles is through the use of convalescent serum made from the blood of those who have had the disease and just recovering. Dr. Park told how because of the limited quantities of this serum available it was being used on those very young children who are likely to contract pneumonia as an after effect of measles.

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## NATURE RAMBLINGS

By FRANK THONE



55

### A Marauder's Winter Quarters

Now that the leaves are off the trees it is easier to find the cocoons of caterpillars, not only the big ones that will yield beautiful moths if they are properly cared for, but the smaller ones that are the homes of species that prey on the leaves of our ornamental and fruit plantings.

Among the most common and most troublesome of these foliage-eaters is the bag-worm, whose very peculiar case may be found hanging by one end to a twig on almost any kind of tree or shrub, though it is said to prefer red cedar and arbor vitae. This case differs in appearance from most cocoons in that it is reinforced with bits of bark and fragments of dried stems, at once trophies and records of the places where the grub has been feeding.

The bagworm's case is peculiar in another respect, because it is one of the few coverings woven by caterpillars that are worn while the owners are still actively feeding. It serves as a protection against birds, wasps and other predatory enemies, and probably accounts to a large extent for the success of the creatures as pests.

If you find any of these bags hanging on the plantings about your yard you should by all means pluck them down and destroy them at once. Throwing them into the dead-leaf bonfire will turn the trick nicely.

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Paper money will stand being folded about 2,000 times before it breaks.

A new process of treating steel with ammonia is said to harden it as though it were tempered.

In a collection of about 1,000 average plants, white flowers were most numerous, and most fragrant.

Both chlorine and sodium in a free state are irritating and poisonous, but in combination they make sodium chloride, or common table salt.