

EVOLUTION-CHEMISTRY

Gorilla Replaced by Gibbon As Nearest Ape Relative

MAN'S EVOLUTION as a physical being began with a creature resembling the gibbon, not with one like the gorilla or the chimpanzee. Such is the opinion of Dr. C. Tate Regan, director of the Natural History Museum of London, as presented before the meeting of the British Association for the Advancement of Science meeting in York. The gibbon is a long-armed, tree-dwelling ape of the East Indian region.

Dr. Regan's opinion is based in part on noses. Man and gibbon have short, broad nasal bones, whereas the bigger anthropoids have long, narrow nasal bones fused together.

Furthermore, while man's descent has been, paradoxically, uphill, the gibbon's has been a real descent—going down. Dr. Regan holds that man and the apes had a common ancestor more advanced than the gibbon.

The principal continents of the earth have each its separate tale to tell of monkey life, the speaker continued. North America's is the shortest and simplest of these annals: North America never had any monkey inhabitants. The catarrhines, or narrow-nosed monkeys, originated in Africa. The platyrrhines, or broad-nosed monkeys, the ones that use their tails as extra hands, have their ancestral home in South America. The tarsioids, a lower group of monkey-like creatures, are traceable to Europe. Neither of these three groups was ancestral to the other two: they have all descended independently of each other from the original monkey family tree.

Molecular Weight of 30,000

How big is a molecule of cellulose, and how is it put together?

This question, which is of practical importance as well as scientific, because cellulose is the principal constituent of all wood, as well as of cotton, flax, rayon and other textile materials, occupied much of the attention of chemists attending the meeting of the British Association. The more chemists know about size and makeup of the cellulose molecule the more they can do with it.

Prof. W. N. Haworth of Birmingham University said that the cellulose molecule is a chain composed of glucose units arranged as rings. The ends of the

chain are chemically "loose," not looped back on themselves. The molecular weight of cellulose, he stated, is about 30,000; this indicates that the molecule is, comparatively speaking, enormous: the molecule of glucose for example has a molecular weight of only 180.

German chemists have been trying to measure the length of the cellulose molecule, but they are still in rather wide disagreement. Prof. H. Staudinger of the University of Freiburg stated that one of these chain-molecules is 4,000 Angstrom units long, while Prof. Hermann Mark of the University of Karlsruhe found a length of only 600.

An Angstrom unit is the inch of the light-measuring physicist. It is one ten-millionth of a millimeter, and a millimeter is about the width of a pencil mark.

Science News Letter, September 17, 1932

PSYCHIATRY

Response to Suggestion Differs with Mental Disease

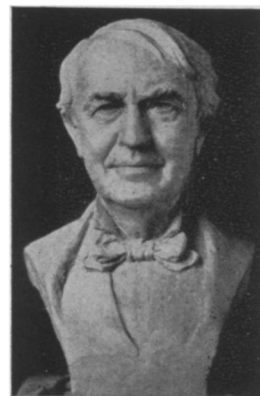
PATIENTS with different types of mental disease respond in very different ways to a test of suggestibility, Dr. Griffith W. Williams told the American Psychologist Association.

The test, which is one which has been used with normal persons, consists of blindfolding the patient and then suggesting to him that he is falling forward. A record is then made of his bodily movements.

Patients with the mental disease

known to psychiatrists as catatonic dementia praecox were the most responsive to suggestion but responded in a negative way. Those of the paranoid group tended to respond positively to the suggestion. Those with manic-depressive insanity, tested while in the manic phase, showed a tendency not to respond in any way to outside suggestion. In view of the fact that these patients are very easily distracted, this result gives psychologists a new basis for distinguishing between suggestibility and distractibility.

Science News Letter, September 17, 1932



Announcement!

THOMAS A. EDISON

by

WALTER RUSSELL

For the first time educational institutions can procure the bust of one of the most famous and best-loved men of science—Thomas A. Edison—whose benign head will prove an incentive to budding scientists. P. P. Caproni and Brother have the honor of the exclusive rights of this work of Walter Russell.

The bust can be furnished (F.O.B. Boston)

In ivory finish \$28.00

In bronze finish 35.00

Send us your order now

P. P. CAPRONI & BROTHER

1916 Washington Street

BOSTON :: MASS.

CONVENIENCE COUPON

for New or Renewal Subscription to Science News Letter

Send this coupon to Washington while you are thinking of it.

Science News Letter,
21st and Constitution Avenue,
Washington, D. C.

Please { start my subscription to SCIENCE NEWS LETTER. I am enclosing
remittance as checked: 2 years, \$7 1 year, \$5

Name.....
Street.....
Address.....
City and.....
State.....

If this subscription is a renewal, check here