

have, personally, little doubt that biological research will in due course prove a human virgin birth to be possible. Probably the individual so produced would be haploid, with but half the normal number of chromosomes, and the chances are that its sex would be male. But whether haploid or normal, male or female, it would vary little from the normal mental and emotional make-up of the human race."

If the story of the virgin birth of Jesus of Nazareth be rejected, Dr. Barnes suggests that the moral ascendancy and religious genius which are undoubtedly His might be held to result from a dominant mutation.

If all mutations, which are spontaneous changes within the germ cell, are to be regarded as manifestations of the creative activity of God, Dr. Barnes argues, the spiritual excellence of Jesus would then be from God.

Appeal of Immortality

Immortality appeals to Dr. Barnes. He writes.

"I have realized how vast is our ignorance of the world in which we find ourselves and to which we belong. Can it be, I am compelled to ask, that with such a feeling of ignorance I shall pass to a realm where knowledge is not, because consciousness has ceased? Must we allow that the desire to understand God's works and ways, which is one of the strongest and purest of human passions, is a vain and hopeless by-product of man's search for material comfort? Do we but rise for a moment above the waters of unconsciousness and, after a brief glance around, sink again to eternal oblivion? If such is indeed our fate, then surely the mystery of human life is unfathomable; unreason must sit enthroned above meaningless change."

Science News Letter, September 2, 1933

Among the most primitive animals living today, science names that egg-laying mammal, the duckbill, and pouched mammals such as the kangaroo and opossum.



25 POWER \$1 GERMAN POCKET MICROSCOPE

A marvelous German 25 power microscope, size of pencil. Enlarges diameter 25 times, area 625 times. Fine lenses give extra large field and great light. Only 4-3/8 inches x 3-8 inch, weighs but 1/2 ounce. Used in schools and colleges thruout the country. Fine for biology, geology, botany, nature study, examining stamps, finger prints, insects, cloth, metals, photographs and thousands of other things. Equip with handy fountain pen clip.

\$1 prepaid. Money back guarantee. Discount for 6 or more
BINOCULARS Over 200 Glasses
All Makes \$1-\$1.10

Everything in binoculars, field glasses, telescopes and optical instruments. The finest and largest assortment in America. Catalog gives all information how to choose the best for your individual needs at the LOWEST PRICE. Buy direct from Importers.

Try America's Leading Binocular House First,
DuMaurier Co., Dept. 269 Elmira, N. Y.

ENGINEERING

More Luxury and Comfort Visioned in Future Automobile

Engineer and Psychologist Discuss Coming Developments Before Meeting of Society of Automotive Engineers

THE AUTOMOBILE of the future that the consumer will demand and get was visualized by William B. Stout, president of the Stout Engineering Laboratories, before the Society of Automotive Engineers in Chicago recently.

A vehicle complete in itself, somewhere between the touring car and the most luxurious trailer and having more space available for passengers and baggage than ever before, was Mr. Stout's vision of the future automobile. He expressed the opinion that individual unit transportation by means of automobiles would be the method of travelling in the future and that the new cars must adapt themselves more and more to longer trip requirements.

Mr. Stout Looks Into Future

Many points in the design of future cars were outlined. Light weight would be a fundamental starting point. Shimmy of the front wheels and the periodic hammering on concrete roads would be eliminated by having individual springs for each wheel. From safety considerations, Mr. Stout argued that the driver's vision must be one of the first things to be improved. The long engine hood that makes it impossible to see around corners is a dangerous element of present-day car design. The corner posts, both back and front, are the cause of many accidents.

The controls of the future car must follow the present trend of easier and easier handling. Perfect brakes are demanded by the drivers. But the demand for smoothness that has led to the development of the doughnut tire has brought difficulties in the ease of handling. The future will see a solution of this difficulty, Mr. Stout prophesied.

One Universal Change

The one change that is going to be universal in all types of cars is that of decreasing weight and so improving performance and riding qualities. Mr. Stout predicted that within five years we will see motor cars without gear

shifts that will be able to climb our steepest highways in high gear without any effort at all.

Health considerations will also govern the future design of automobiles was the opinion expressed by Dr. F. A. Moss of George Washington University. Air conditioning, eye strain and posture were the three points stressed by Dr. Moss. Improvements along these lines will lead to radical changes in the automobile of the future and will repay the company that initiates these advances.

Dr. Moss proposed that rats should be used to test out the air conditions in new ventilating schemes for cars. By hanging cages of rats at various points within test cars it would be possible to measure the amount of carbon monoxide and the injurious drafts present in new designs. Control of the temperature and humidity within a closed car would do much to improve the health of the occupants.

Eye Fatigue Dangerous

Statistics show that accidents are more likely to occur after a long trip and Dr. Moss stated that this can be attributed to eye strain. Tests with various types and makes of cars showed that there was a decided decrease in visual acuity with prolonged driving, particularly after the first 400 miles. Tests of this type will lead the automobile manufacturer to develop cars that create the least possible eye fatigue.

Bodily posture governed by seat design is an important factor in the health and safety of the driver. Dr. Moss stated that no researches had been published on these points and was of the opinion that they would be well worth investigating. He also suggested that some attention should be paid to hard cushions versus soft ones and of cloth versus leather upholstery.

Science News Letter, September 2, 1933

Apricots, which are richer in vitamin A than any other fruit, lose more than half this food factor when dried.