About forty or fifty years ago, he stated, when cases of abnormal growth were just beginning to be studied, some observers were struck with the fact that patients suffering from such a malady, now known in medical parlance as acromegaly, underwent changes cimilar to those occurring in the maturing phases of a gorilla. There was an immediate inclination to explain such phenomena as an evolutionary reversion to an ancestral state now represented in the bodies of gorillas, really back to the ape stuff, in short.

Sir Arthur says of this explanation:

"It seems more legitimate, in the present state of our knowledge of the action of hormones on the growth of the body, to regard gorilline characters, whether they occur as a normal manifestation in the life-history of the gorilla or as an abnormal manifestation in the life-history of the acromegalic, as being due to an increased action of that element of the pituitary gland which influences the processes of growth."

This argument has been opposed on the ground that the gorilla does not possess an unusually large pituitary gland, but this contention is refuted by calling attention to the obvious complexity of that body which produces many substances the influence of which cannot be determined "by the crude use of scales or microscope".

Careful study of abnormal growth cases show the influence of the pituitary gland on the growth of the muscular, bony and alimentary systems, just the systems which undergo so great a degree of increase during the later stages of the development of the gorilla.

"We may therefore legitimately infer," concludes Sir Arthur, "that, in the evolution of the gorilla, the pituitary has played a prepotent part. The evidence, as it stands, is enough to justify the student of man and ape in believing that he has obtained a real glimpse into the machinery of evolution."

SMALLEST BACTERIA REVEALED THROUGH COATING WITH GOLD

A new and original method, by which ultra-microscopic particles a thousand times smaller than those observed with the aid of ultra-violet light may be rendered visible, is described by Prof. H. Bechold of the Institut fuer Kolloidferschung at Frankfort-on-main. Prof. Bechold is already very well known in scientific circles as a colloid chemist. The method is based on the discovery of Sir. W. B. Hardy, F. R. S., that negatively charged colloidal particles combine firmly with certain metals.

Prof. Bechold began by immersing paratyphoid and other bacilli visible under the ordinary microscope in a solution of gold chloride, and subsequently reducing them to ash on a microscope slide, so that only their gilded shells remained. These could then be used as centers for the deposition of further gold from a suitable solution.

The method was next applied to solutions of egg albumen, the particles of which are much too small to be visible even under the ultra-microscope. Nothing

was revealed on ashing, but when the invisible gold particles were used as nuclei for the deposition of further gold, it was possible to count accurately the number of albumen particles present in a given volume. The particles of albumen counted in this way were found to consist, on the average, of only fifty chemical molecules apiece.

The same technique was then used to examine filter-passing micro-organisms. Success was claimed particularly in the case of the bacteriophage discovered some six years ago by the famous French-Canadian bacteriologist, d'Herelle. This bacteriophage is one of the great mysteries of micro-biology. It brings about the destruction of dysentery and other bacilli, but expert opinion is sharply divided as to whether it is a living organism or a ferment. At any rate it is enormously smaller than the bacteria which it attacks.

Prof. Bechold has also attempted to gild the ultra-microscopic, virus of small-pox, but so far without success, although he is continuing his experiments. In view of the claim by Dr. W. E. Gye and J. E. Barnard that cancer is due to a filter-passing micro-organism, great interest has been excited by Prof. Bechold's investigations among British cancer research workers.

BABIES WITH RICKETS SLOW TO CUT TEETH

All babies who cut their teeth late may not have rickets but all who have even mild rickets are slow to cut teeth.

In a report to the American Medical Association, Drs. Julius Blum and Jacob Mellion say that fully 75 per cent. of all artificially fed and nearly 50 per cent. of all breast fed infants show evidence of a mild form of rickets during the first two years. This condition frequently passes unnoticed and is prevalent among rich and poverty-stricken alike, in contrast to the severe type which is confined almost entirely to the poor.

Observations made at the Home for Hebrew Infants in New York seem to warrant the statement that not only the appearance of the first tooth but subsequent ones as well are delayed by rickets. "This", the experts say, "is interesting in showing the systemic nature of the metabolic disturb nce of rickets as well as the close relation of teething to the development and ossification of the long bones."

In spite of the definite difference between normal and rachitic infants, however, retarded teething cannot be considered, the experts say, as a definite symptom for rickets diagnosis because of the appreciable influence of other factors, notably hereditary, on the evolution of the teeth.

The sense of smell is said to grow more keen as we grow older.

Eighty per cent. of the homes in the United States are built of wood.
