Letters to the Editor

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NOTES ON POINTS IN SOME OF THIS WEEK'S LETTERS APPEAR ON P. 724.

CORRESPONDENTS ARE INVITED TO ATTACH SIMILAR SUMMARIES TO THEIR COMMUNICATIONS.

The Dentition of *Australopithecus**

THE importance of *Australopithecus* as a possible near relative of man is such that it seems but right that the world should have the facts at the earliest moment after they are fully confirmed.

The Taungs ape is represented only by the skull of a six-year-old 'child'; and though some of its human-like characters are due in part to the infantile condition, there are a number of others that seem to show that it is more nearly related to man than to the chimpanzee. Of these, the most convincing is the structure of the milk molars, which agree closely with those of man and differ very greatly from those of the chimpanzee and gorilla. But owing to the superficial general resemblance of the skull to that of a young chimpanzee, many seem still to be inclined to regard the Taungs ape as a variety of chimpanzee.

The discovery at Sterkfontein of the adult skull of an allied species is thus of great importance. It will be some months naturally before a full account of the skull can be published as the bone is very friable, and development has to be done slowly, but as the upper dentition is now almost fully known, a preliminary account of it cannot fail to be of interest.

FIG. 1. The upper dental arch of *Australopithecus transvaalensis* Broom. As the maxilla are detached, the exact relation of one to the other is uncertain. Three of the teeth of the right maxilla have been cracked and the fragments pushed apart during fossilization, but otherwise they are practically perfect. ‡ natural size.

When I sent off the first notice of the discovery a few days after the find was made (see NATURE, Sept. 19, p. 486), only the upper part of the skull and the right maxilla were known. In the stone on the left side of the left orbit I later discovered the nearly perfect left maxilla, with both premolars and the 1st and 2nd molars in perfect condition and the

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sockets of the incisors and canine. The 3rd molar is probably also present but it cannot be displayed without destroying an important part of the skull.

FIG. 2. Irregular section across the roots of some of the teeth of the right maxilla of *Australopithecus transvaalensis* Broom; the little shaded area between the roots of *m*¹ is part of the floor of the maxillary antrum. Note the remarkable degree to which the roots of the molars spread. Natural size.

The premolars and 1st molars are so remarkably human-like that there is scarcely a doubt that had they been found without the skull they would have been held by most to be human. They bear no close resemblance to the corresponding teeth in the chimpanzee. Each premolar has only two roots.

The canines are relatively small, and the incisors large. Perhaps the most striking character is the fact that the canine and the 2nd incisor are in contact as in man, and not with a gap between them as in living anthropoids.

It is unnecessary at present to discuss in detail the various features of the dentition, but Figs. 1 and 2 are sufficient to show that the Sterkfontein ape at least is not a chimpanzee, and that it approaches man in quite a number of characters.

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Sept. 29.

A New Upper Triassic Fossil Insect Bed in Queensland

SOME four years ago, two members of the staff of the Queensland Geological Survey, Messrs. Owen Jones and Denmead, picked up at Mount Crosby, some thirty miles inland from Brisbane, two finely preserved cockroach tegmina on pieces of dark brown shale. These were sent to me for description, and proved to belong to two new species of the genus *Triassoblatta*, originally described from the Rhaetic of Ipswich, Queensland (a locality about seven miles from Mount Crosby).

On my visit to Queensland in June 1936, members of the University of Queensland and of the Geological Survey, including Mr. Denmead, accompanied me to this locality. The original bed of shale, from which the cockroach tegmina came, was found without much difficulty. It appears to represent the mud