rather prominent postorbital processes which are characteristic of the larger species.

Measurements.-Hind foot measured on the skin about 60 mm.

Measurements of skull (with corresponding dimensions of a skull of ansorgei in parentheses).—Condylo-basal length 68.7(77) mm.; zygomatic breadth 33 ca. (38); interorbital constriction 10.2(11.4); mastoid breadth 24.2(27.1); nasal  $28 \times 10.1(33 \times 10.5)$ ; incisor to  $m.^3$  36.8(42.3); diastema 22 (23.9); length of anterior palatal foramina 8.8(8.2); length of preorbital fossa for masseter medialis 14 (14); least diameter of zygomatic plate 6.2(8.1); molar crowns 10.5(12.8).

### XXVIII.—The Method of taking the Incisive Index in Rodents. By OLDFIELD THOMAS.

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THE angle at which rodent incisors protrude from the jaw has long been recognized as an important character of different groups, but it is only recently that an attempt has been made to define that angle more exactly, instead of merely speaking of "incisors thrown forward" and so on.

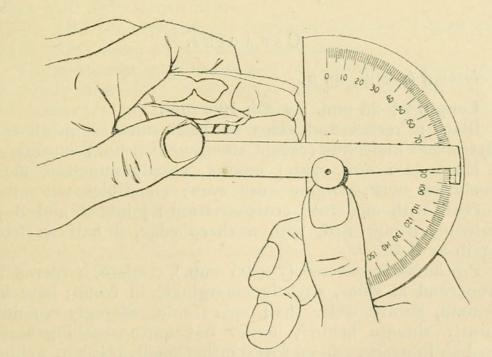


Diagram showing method of taking incisive index in rodents.

This angle, when exactly measured and defined, proves to be exceedingly useful as a systematic character, but it is essential that the way it is taken should be clearly understood.

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The line of the grinding-edge of the check-teeth being taken as a basis, the angle was in the first paper \* deduced from that formed by the terminal part of the incisor; but later on † I have found it better to use the whole extruded part of the latter tooth. But since the description of the taking of the angle might be easily misinterpreted, I have now had prepared the accompanying diagram showing the way the process is carried out and the angle read off. This will, I hope, facilitate the work of other observers.

Incisors thrown forward are those with a high resultant angle, and might be called, as suggested in 1918 ‡, "proodont," upright ones (approximating 90°), "orthodont," and those turned in towards the throat, with low angular index, "opisthodont."

The benefits of such definition as is given by a numerical angle have already been fully emphasized, and need not be here again detailed.

## XXIX.—Papers on Oriental Carabidæ.—III. By H. E. ANDREWES.

#### CARABINI.

#### Calosoma beesoni, sp. n.

Length 24-25 mm. ; width 10.5 mm.

Black ; vertex and sides of head, sides of prothorax, elytra, and underside (except along median line) æneous.

Head (4.5 mm. wide) convex, closely punctate, more finely on neck, strigose near eyes; mandibles not much curved, with moderate cross-striation; joints 2 and 3 of antennæ compressed, with a sharp edge, 3 half as long again as 4.

Prothorax transverse  $(7 \times 4.5 \text{ mm.})$ , cordate, bordered in front and at sides, slightly emarginate in front; base bisinuate, hardly wider than apex; sides strongly rounded, faintly sinuate behind, border not quite reaching base; median line faint; basal foveæ rather small, adjacent to hind

<sup>\*</sup> J. Bombay N. H. Soc. xxiv. p. 408 (footnote) (1916).

<sup>†</sup> Ann. & Mag. Nat. Hist. (8) xviii. p. 302 (footnote) (1916).

<sup>‡</sup> Ibid. (9) i. p. 35 (footnote) (1918).



Thomas, Oldfield. 1919. "XXVIII.—The method of taking the incisive index in rodents." *The Annals and magazine of natural history; zoology, botany, and geology* 4, 289–290. <u>https://doi.org/10.1080/00222931908673892</u>.

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