CORRESPONDENCE.

FOSSIL PALÆOZOIC INSECTS.1

Sir,—In Mr. Henry Woodward's recent paper on a new and remarkable Orthopterous Insect (Lithomantis carbonarius) from the Coal-Measures of Scotland (Quart. Journ. Geol. Soc. Lond., 1876, vol. xxxii. p. 60. pl. ix.), is given a list of known Palæozoic fossil forms, to which I would venture to make some slight additions. Most remarkable to my mind is the constant discovery of close relationship between the ancient forms of Insect-life in Europe and America, which Mr. Woodward has been one of the most conspicuous in pointing out. I shall add as another fact tending in the same direction that my Megathentomum and Goldenberg's Acridites are but two closely allied species of one genus.

Allow me to observe that Archimylacris is a Carboniferous, not a Devonian type (see my paper, Geol. Mag. 1868, Vol. V. p. 177), and that my Mylacris is not a Neuropterous, but an Orthopterous type. Mr. Woodward cannot have seen Goldenberg's Fauna, Sarapontana fossilis (1873), or its predecessor the Jahresbericht Gymn. zu Saarbrücken (1867), in which a Blattina Tischbeinii is described.

I venture to send what I believe to be a complete list of the Carboniferous Insects of America arranged by families.

LIST OF DESCRIBED AMERICAN INSECTS FROM THE CARBONIFEROUS FORMATION.

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ORTHOPTERA.
 1. Blattina venusta, Lesq., 2nd Rep. Geol. Ark., p. 314.
              Heeri, Scudd., Can. Nat. (N.S.), vol. vii., p. 272.
bretonensis, Scudd., Can. Nat. (N.S.), vol. vii., p. 271.
sepulta, Scudd., Proc. Am. Asso. Adv. Sc., vol. xxiv., p. 111.
 5. Mylacris anthracophilum, Scudd., Geol. Ill., vol. iii., p. 568.
 6. Archimylaeris acadicum, Scudd., Daws. Acad. Geol., p. 388.
 7. ? Mantis sp. Scudd., Geol. Ill., vol. iii., p. 567.
8. Archegogryllus priscus, Scudd., Proc. Bost. Soc. Nat. Hist., vol. xi., p. 402.
                                               NEUROPTERA.
 9. Miamia Bronsoni, Dana, Sill. Journ. (2), vol. xxxvii., p. 34.
        " Danæ, Scudd., Geol. Ill., vol. iii., p. 566.
11. Hemeristia occidentalis, Dana, Sill. Journ. (2), vol. xxxvii., p. 34. 12. Crestotes lupidea, Scudd., Geol. Ill., vol. iii., p. 567. 13. Megathentomum pustulatum, Scudd., Geol. Ill., vol. iii., p. 570. 14. Ephemerites simplex, Scudd., Geol. Ill., vol. iii., p. 571.
         " gigas, lb. p. 571.

16. ", affinis, Ib. p. 472.
17. Libellula carbonaria, Scudd., Proc. Am. Asso. Adv. Soc., vol. xxiv., p. 110.

18. Haplophlebium Barnesii, Scudd., Daws. Acad. Geol., p. 387.
19. Paolia vetusta, Smith, Sill. Journ. (3).
                                             ARACHNIDA.
20. Arthrolycosa antiqua, Harg., Sill. Journ. (3), vol. vii., p. 219.
21. Architarbus rotundatus, Scudd., Geol. Ill., vol. iii., p. 568.
22. Eoscorpius carbonarius, Meek-Worth., Sill. Journ. (2), vol. xlv., p. 25.
23. Mazonia Woodiana, Meek-Worth., Geol. Ill., vol. iii., p. 563.
                                                 MYRIAPODA.
24. Xylobius sigillariæ, Daws., Quart. Journ. Geol. Soc. Lond., vol. xvi., p. 268.
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Ib. p. 234. Ib. p. 235. ,, ¹ The publication of this letter has by accident been delayed, owing to the temporary loss of the original. - Edit. Geol. Mag.

" similis, Scudd., Mem. Bost. Soc. Nat. Hist., vol. ii., p. 233.

fractus

Dawsoni,

25.

28. Archiulus xylobioides, Scudd., Ib. p. 236. 29. Euphorberia armigera, Meek-Worth., Sill. Journ. (2), vol. xlv., p. 26.

major, Meek-Worth., Ib. p. 26.

Of these, No. 8 is the only one which has not yet been figured. Of No. 19 I cannot now lay my hand on the paper containing the description. It appeared about seven or eight years ago.

Nos. 5, 7, 9, 10, 11, 12, 13, 19, 20, 21, 22, 23, 29, and 30 come from the Ironstone nodules of Mazon Creek, near Morris, Illinois.

Nos. 14, 15, 16, come from shale, near Morris, Ill.

No. 1 comes from Frog Bayou, Arkansas.

Nos. 2, 3, 4, 6, 17, and 18, come from Cape Breton.

Nos. 24 to 28 come from Sigillarian stumps at the Joggins, Nova Scotia. No. 8 comes from Tallmadge, Ohio.

BOSTON, U.S.A.

SAM. H. SCUDDER.

NEW ORTHOPTEROUS INSECT IN THE COAL-MEASURES OF SCOTLAND.1

Sir,—I read with interest Mr. Woodward's paper on an Orthopterous Insect from the Coal (see Quart. Journ. Geol. Soc. Lond., 1876, vol. xxxii. p. 60, pl. ix.), and I take the liberty to direct attention to my paper on Fossil Blattidæ (in der Vierteljahrzchrift der tühner Naturfourch., Gesellschaft, vol. ix. 1864, p. 273). In it are several species omitted from Mr. Woodward's list, viz.:

Blattina helvetica, Heer, from Erbignon, Valais. - Fritschii, Heer, ,, Mannebach, Thuringia. - clathrata, Heer, " ,, - latinervis, Heer, "

all from the Carboniferous period. Blattina helretica is also figured in my "Primæval World," p. 20 (English Edition, just published, DR. OSWALD HEER, PROF. London, Longmans).

Zurich.

FURTHER DISCOVERIES OF OSSIFEROUS CAVERNS IN NEW SOUTH WALES.

Sir,—I inclose letter from the Editor of the "Bathurst Free Press," and part of a newspaper, relative to the discovery of some caves similar to those of Wellington, N.S.W., which I examined in company with the late Prof. A. M. Thomson with such happy results. I have seen some bones and teeth said to have been found there, and these are all referable to the extinct fauna of the Wellington Valley. I would have gone up; but since the discovery became known, all our scientific ignoti are interfering, and have requested the Trustees of the Australian Museum to take the matter in hand! Perhaps I shall have an opportunity to examine more specimens soon, and will let you know the result.

AUSTRALIAN MUSEUM, CURATOR'S OFFICE, SYDNEY, August 5th, 1876.

GERARD KREFFT, Curator Australian Museum.

From the inclosures in Mr. Krefft's letter, we learn that several

¹ This note (together with Prof. Scudder's communication) has been unintentionally omitted, the original having been accidentally lost, and only now recovered. EDIT. GEOL. MAG.