## SOME SYNONYMS IN NORTH AMERICAN LYCOSIDÆ.

BY RALPH V. CHAMBERLIN, PROVO, UTAH.

Pardosa diffusa, Emerton (Trans. Conn. Acad., 1909, p. 208), = Pardosa moesta, Banks (Proc. Acad. Sci., Phil., 1892, p. 70).

Pardosa tristis, Keyserling (Verh. d. z. b. Ges. Wien, 1887, p. 485), = Pardosa xerampelina, Keyserling (Verh. d. z. b. Ges. Wien, 1876, p. 622).

Pardosa atromedia, Banks (Proc. Cal. Acad. Sci., 1904, p. 355), = Pardosa lapidicina, Emerton (Trans. Conn. Acad. Sci., 1885, p. 355). This is a common species in Southern California, where the habitat is closely similar to that of the species in the north-east. The agreement of eastern and western specimens in structure and habit is complete.

Lycosa crassipalpis, Emerton (Trans. Conn. Acad. Sci., 1909, p. 206), is clearly a Schizocosa. It is very close to saltatrix, Hentz, from which its differences are likely to prove less than specific, variation in saltatrix being large.

Lycosa contestata, Montgomery (Proc. Acad. Sci., Phil., 1903), = Lycosa pratensis, Emerton (Trans. Conn. Acad. Sci., 1885, p. 483).

Lycosa arenicola, Scudder (Psyche, 1877), is preoccupied, and hence must give way to Lycosa Pikei, Marx.

Lycosa pacifica, Banks (Proc. Cal. Acad. Sci., 1904, p. 354), = Lycosa erratica, Hentz. Examination of extensive material from Utah to California, in comparison with material from the middle west and the east, shows no good basis for the specific or varietal separation of the western specimens. Variations in some points of the characteristic colour pattern are interesting, but wholly in line with the tendencies shown in various other groups in the same regions.

Allocosa degesta, Chamberlin (CAN. ENT., 1904, p. 287), is doubtless the same as *Trochosa noctuabunda*, Montgomery (Proc. Acad. Sci., Phil., 1904). It is a typical Allocosa.

Lycosa exalbida, Becker, doubtfully listed in my Revision under Allocosa, was included in the N. A. spider fauna through an error, and should be stricken from our list. It is a South American species.