" Riley says with a slight

epeated withnother place adds:

twenty-third heavy frosts 78, but in the mg produced ic 'rhythmic d songs that e 'slumbrous n it a more s an 'audible

of our State t, but it is a ore northern shrubbery. ne spot day ight arrives. s farther off ng on every from all the lous, melanas no votary eat-treatat they will song is thus t, the whole ement of its two; treat, less mate as is probably forming the

a high trill ills of very ht sunshine "a long and otes, which pitch than O, and the E. niveus. Occanthus latipennis Riley. Riley describes the note as follows: "The shrill cry of lutipennis is continuous and recalls the trilling of a high-pitched dog-whistle in the distance. The key varies, however, and is sometimes much less high and more musical than at others. The commingled shrills of the species recall also the distant croaking of frogs in the spring. The broad wings are thoroughly elevated during the act, or even bent forward, and the vibration is so rapid that there appears to be no motion." McNeill says: "Its song has been described as a 'continuous, high-keyed trill, continued for fifteen minutes or more.' This is exactly the song of fasciatus. Since there has been so much confusion in the species of this genus, there is a chance that the song described above is mistakenly referred to latipennis."

Oecanthus angustipennis Fitch. McNeill says of this species, that it "has a song which resembles that of fasciatus in some degree, but it is very much fainter and lasts for about five seconds, with an equal interval between the trills." Davis says its song is "a faint continuous whirr, lasting only about five seconds, with an equal interval of rest." See also the notes under E. niveus.

Anaxipha exigua (Say). Perhaps the same as A. pulicaria (Burm.) The only one who has spoken of its song is Davis, who simply says it "has a particular silvery tone."

Orocharis saltatrix Uhl. Riley writes: "The stridulation of this cricket is a rather soft and musical piping of not quite half a second's duration, with from four to six trills, but so rapid that they are lost in the distance. The key is very high, but varies in different individuals and according to moisture and temperature. It most resembles the vibrating touch of the finger on the rim of an ordinary tumbler when three-fourths filled with water, repeated at intervals of from two to four per second, and may be very well likened to the piping of a young chick and of some tree frogs. As the species is very common in the south-west, its chirp is everywhere heard, and is so distinctive that when once studied it is never lost amid the louder racket of the katydids and other night choristers. It is also frequently heard during the day time when the weather is damp and cloudy."

## LOCUSTIDAE.

"These," writes Riley, "are the merry choristers that make our woods and valleys ring with their pleasant songs during the evenings of late summer and early fall. They are chiefly nocturnal in their habits, but not entirely so, for each afternoon during the courting time, and long before the sun has disappeared in the west, a few of them may be seen flying about from place to place, while others are occasionally heard in their retreats as though tuning their instruments preparatory to the grand evening concert."

Scudderia angustifolia, (Harr). This insect is more noisy by night than by day, and the songs differ considerably at these two times. The day song is given only during sunshine, the other by night and in cloudy weather. I first noticed this while watching one of these little creatures close beside me. As a cloud passed over the sun, he suddenly changed his note to one with which I was already familiar, but without knowing to what insect it belonged. At the same time all the individuals around,



Fig. 42.—Note of Scudderia angustifolia by day.

whose similar day song I had heard, began to respond with the night cry. The cloud passed away and the original note was resumed on all sides. Judging that they preferred the night song to that of the day from their increased stridulation during the former period, I imitated the night song during sunshine, and obtained an immediate response in the same language. The experiment proved that the insects could hear as well as sing. So on another day, at 4 p.m., the sun suddenly beclouded, I heard four or