

studies of these insects. In the case of the three species which fly later in the season, it is possible that they either pass the winter as pupæ or do not pupate until spring.

The most striking thing to be learned, however, from each of these tables is the great disparity in numbers between the males and females caught. The males greatly outnumber the females in every instance. Only about 17 per cent. of the *Clisiocampa americana* in Table I. were females. But a little over 6 per cent. of the *Feltia subgothica* in Table II. were females, while nearly 41 per cent. of *jaculifera* were of this sex. Less than 12 per cent. of the *Lachnosterna fusca* in Table III. taken in 1889, and but little over 6 per cent. of those taken in 1892, were females; with *dubia* the proportion of females is greater, being about 32 per cent.; no females of *ilicis* were taken in either year.

This great preponderance of the males over the females has also been noticed in every other species of the trap lantern material which has been studied of whatever order. It indicates that the males are much more active than the females, and is of the greatest importance when considering the insecticidal value of the trap lantern. For undoubtedly many of the males have copulated before being caught, and enough others remain uncaptured to fertilize the remaining females. Therefore the perpetuation of the species is provided for, and the insecticidal value of the lantern is rendered too small to be practicable.

BOOK NOTICE.

THE BUTTERFLIES OF NORTH AMERICA. Third Series, Part XIII.

Another part of Mr. Edwards's magnificent work has just appeared, and for beauty of illustration and interest of the letter-press, it perhaps surpasses all previously issued parts. The first plate shows the type of *Chionobas Chryxus*, var. *Calais*, Scudder, and the accompanying letter-press gives some interesting data collected by Mr. T. E. Bean concerning a similar form found at Banff, in the Rocky Mountains. The second plate shows in full all stages of the rare Canadian species, *C. Jutta*. This is accompanied by 14 pages of letter-press, in which nearly everything that is known concerning this species in America is related in a most entertaining manner. To the Rev. T. W. Fyles, F. L. S., of South Quebec, belongs the honour of being the only person so far who has reared *Jutta* from the egg to imago and described the different stages.