Family 3.—Acrididæ, (Locusts.)

This family contains the most destructive insects of the order; indeed I may say, the most destructive of all insects, the terrible migratory locusts. Both the old and new worlds have time and again been scourged by their countless millions, well named by the eastern poet, "The army of the Great God." The desolation caused by their ravages has been the theme of poets and historians since the days of Pharoah's humiliation, when "they covered the face of the whole earth so that the land was darkened."

The noise made by the beating of their wings during flight has been compared to the rushing of a mighty wind, the roar of distant thunder, the crackling sound of burning stubble, etc., and is thus described by the poet Southey:—

> "Onward they came, a dark continuous cloud
> Of congregated myriads numberless,
> The rushing of whose wings was as the sound
> Of a broad river headlong in its course
> Plunged from a mountain summit, or the roar
> Of a wild ocean in the autumn storm
> Shattering its billows on a shore of rocks."

The *Acrididæ*, or Locusts, (Fig. 18) may be distinguished from the grasshoppers by the antennæ being short, not exceeding the body in length, and by the number of joints in the feet, the locusts having only three, the grasshoppers four. The wing-covers are generally long and narrow and slope downwards on the sides like a roof. The under wings are broadly triangular, and when at rest are folded in plaits like a fan. Instead of a long exserted ovipositor like the grasshoppers and crickets, the female locust is provided with four wedge-like pieces, placed in pairs above and below, and opening and shutting opposite to each other. When about to deposit her eggs the female forces these wedges into the earth, these being opened and withdrawn enlarge the opening; the operation being repeated until a hole is formed large and deep enough to admit nearly the whole of the body.

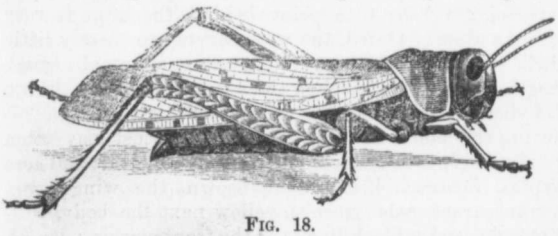

Fig. 18.

Prof. Riley thus describes the manner in which the Rocky Mountain locust (*Caloptenus spretus*) deposits her eggs. (Fig. 19 represents the different positions.) "The female, when about to lay her eggs, forces a hole in the ground by means of the two pairs of horny valves which open and shut at the tip of her abdomen, and which, from their peculiar structure, are admirably fitted for the purpose. With the valves closed she pushes the tips in the ground, and by a series of muscular efforts and the continued opening and shutting of the valves, she drills a hole until, in a few minutes (the time varying with the nature of the soil) the whole abdomen is buried, the tips reaching an inch or more below the surface by means of great distention. Now, with hind legs hoisted straight above the back and the shanks hugging more or less closely the thighs, she commences ovipositing, the eggs being voided in a pale, glistening and glutinous fluid which holds them together and binds them into a long, cylindrical pod, covered with particles of earth which adhere

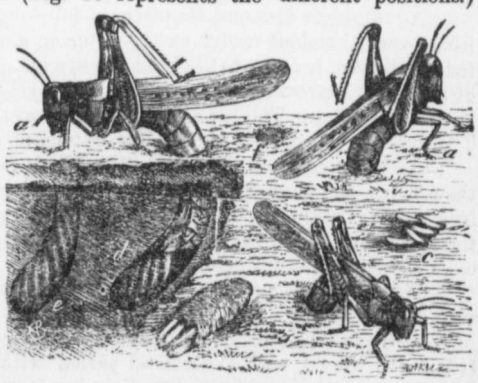

Fig. 19.