

these are the radial furrows ; the region of the cephalothorax between the anterior pair and embracing the eye region is called the head or pars cephalica. The mandibles are the anterior pair of mouth-parts ; they are two-jointed, the second joint being called the fang, and furnished with the opening of the poison gland. The maxillæ form the second pair of mouth-parts ; to the sides of the maxillæ are attached the palpi, which in the adult male have the terminal joint peculiarly modified for sexual purposes. Between the maxillæ and articulated to the sternum is the lip. The sternum is the ventral plate of the cephalothorax, the entire region between the base of the legs. The legs, of four pairs, are numbered from before backward, I., II., etc. The legs are seven-jointed ; the joints are called, beginning at the most basal, coxa, trochanter, femur, patella, tibia, metatarsus, and tarsus ; in a few peculiar groups there is an eight joint, the onychium. At the end of the tarsus, or onychium if present, are two claws, equal in size ; below and between them is frequently a third, smaller and more curved. The claws may be furnished with teeth, and are called dentated. Sometimes under the two larger claws, in place of a third, is a dense brush of hairs called a scopula. The abdomen is joined to the cephalothorax by a slender pedicel. At, or near, its extremity on the under side or venter are the spinning organs called spinnerets ; these are of three pairs, the middle pair smaller and concealed by the other two. The spinnerets are probably always two-jointed, but in some spiders one pair is very prominently so. At the base of the lower pair of spinnerets is sometimes a transverse surface provided with spinning tubes ; this is called the cribellum. Complementary to this in function is a row of stiff hairs or bristles on the posterior metatarsi called the calamistrum. Near the base of the spinnerets is a pair of stigmata, which are sometimes placed much more anteriorly, even nearer the basal than the distal end of the abdomen. When so situated there is formed a transverse ridge or fold on the venter. Near the base of the venter is a pair of transverse slits ; these are the lung-slits. In some spiders there are two pairs. Between them on the median line is the opening of the genital organs ; in the female called the epigynum. Its structure, together with the structure of the male palpal organ, is of utmost importance in the determination of species.

Because of certain peculiarities, I shall treat the cave forms separately in the key. The characters of the families as indicated in the system should be used in connection with the key.