Fulcral Arms.—Fig. 5.—The inner surface of the fulcral arms (FA) of *P. clavata* has about 23 circular *sensilla placodea* (PO). According to Slifer (1961) plate organs apparently are pressure sensitive and may function in a similar fashion to the locust tympanum. Due to weak sclerotization a plate organ is somewhat flexibile and undergoes some movement upon being touched. Considerable movement occurs between the fulcral arms and sting (Hermann 1976) since the fulcral point for sting depression and rotation is at the basal point of attachment between these 2 structures. Since sting depression puts no particular pressure on the fulcral arms it is suggested that the plate organs function primarily during sting rotation or pivoting.

Rami.—Fig. 6 and 7.—The 2nd ramus (RA) ex-

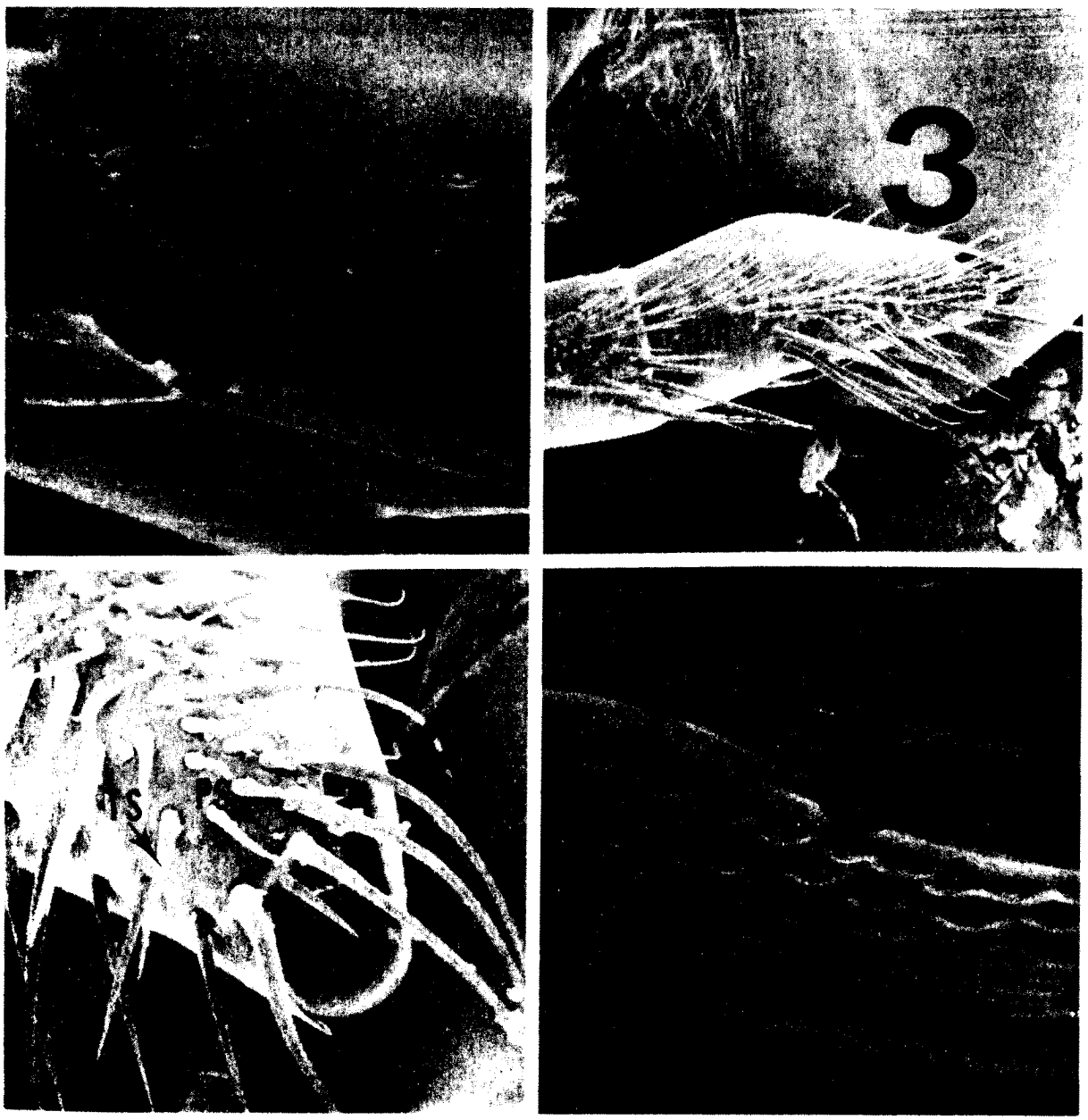

FIG. 2–5.—Scanning electron micrographs of sensory structures on the venom apparatus of *Paraponera clavata*. 2. Distal tip of sting (ST) and lancets (LN) with minute chemoreceptive pore structures (PS) (2000×). 3. Distal tip of one gonostylus, showing the proximal and distal lobes (PR and DR respectively) and numerous trichoid sensilla (100×). 4. Enlarged view of the distal gonostylar lobe, showing the long trichoid sensilla (TS) and minute pore stuctures (PS) (500×). 5. Mesal view of fulcral arm (FA), showing the two rows of pressure sensitive plate organs (PO) (2000×). Note: Figures reduced to 93½%.