

brown; a very narrow and indistinct median brown line. Male hypopygium with the ninth tergite (Pl. II, fig. 27) short, rather tumid, the caudal margin with a broad, U-shaped, median notch, the caudal margin densely provided with short, black hairs; beneath the tergal lobes, between the pleurites, are two small rounded lobes that are densely set with short black bristles. Ninth pleurite extensive, oval, with numerous hairs; outer pleural lobe (Pl. II, fig. 22) almost circular in outline, the outer face with numerous short hairs; inner pleural lobe (Pl. II, fig. 25) of rather simple structure, two armed, the outer arm directed caudad, at its tip forming a blackened chitinated hook; the inner arm is directed proximad and slightly dorsad, the blunt apex bent very slightly cephalad, almost the whole appendage with dense, pale hairs that are short or absent on the apex of the lobe, longest on the inner margin; viewed from above it is seen that this inner arm sends out a lobule on the inner dorsal side before the apex; the dorsal margin of this lobule is narrowly but heavily chitinated. Suture between the ninth sternite and pleurite not very distinct, the sternal region destitute of hairs.

Locality: Holotype, ♂, west of Konganevik, Camden bay, Alaska, June 1914 (F. Johansen). No. 634. Paratopotypes, seven ♂'s, Nos. 635, 636, June 1914; Nos. 433, 437, 439, 440, and 441, July 4, 1914.

Genus *Nephrotoma* Meigen.

Nephrotoma Meigen; Illiger's Magazine, p. 262; 1803.

Nephrotoma arctica, n. sp.

General colouration black; abdominal tergites with an interrupted orange-yellow stripe on either side of the median line; wings hyaline with the stigma dark brown; a brown cloud at the end of the sector.

MALE.—Length, 12.5–13 mm.; wing, 12–13.2 mm.

FEMALE.—Length, 14 mm.; wing, 13 mm.

Palpi black. Frontal prolongation of the head short, black; nasus elongate, black. Antennae black, the basal enlargement of the flagellar segments not conspicuous (Pl. II, fig. 14). Head broad, black, faintly shiny; the vertex surrounding the antennal bases yellow.

Pronotal scutum black, scutellum yellowish. Mesonotum black, faintly shiny; in some specimens a narrow yellowish line on the praescutum near the suture and a yellowish mark before the pseudosutural fovea indicate the usual yellowish ground-colour of the thorax in this genus of flies. Pleura black, faintly dusted with grey; dorso-pleural membranes dull yellow, a linear yellowish mark on the side-pieces of the mesonotal postnotum just in front of the halteres. Halteres dark brown, the head somewhat yellowish. Legs with the coxae dusted with grey; remainder of the legs dark brown. Wings whitish hyaline, the costal and subcostal cells not brighter; stigma small, dark brown; a paler brown cloud at the end of the sector, extending down to cell *first M*₂; indistinct seams along *Cu* and its branches; veins black; venation (Pl. I, fig. 6) *R*_s rather long for this group of flies, a little longer than *R*₂₊₃; cell *M*₁ sessile or very short-petiolate.

Abdomen greyish black; lateral margins of the tergites very narrowly paler, in some specimens a broad, interrupted, sublateral orange-yellow stripe on either side of the mid-dorsal line. Male hypopygium with the ninth tergite (Pl. III, fig. 28) quadrate, the caudal margin with a small, deep, U-shaped, median notch, the lateral lobes squarely truncated, finely spiculate, the outer lateral angle with a blunt point that is minutely toothed beneath. Outer pleural appendage (Pl. III, fig. 29) an elongate-oval lobe that is produced into a blunt point at the tip; inner pleural appendage chitinated and at its tip produced into a short beak; pleural suture rather long, at its inner end curved slightly