would not seem to be fibrous but rather of a similar cellular structure to that of the ganglia themselves. On the other hand, the ganglia of the tail are connected by very long and narrow, distinctly fibrous commissures, placed close together.

The colour of the animal, in a fresh state, as observed on the Norwegian North Atlantic Expedition, was a uniform pale red.

Habitat.—Several specimens of this magnificent Mysidan were collected on the Challenger Expedition in the Southern Ocean from very great depths. The following is a list of the Stations :—

Station 147, December 30, 1873 ; lat. 46° 16′ S., long. 48° 27′ E. (off Crozet Islands) ; depth, 1600 fathoms ; Diatom ooze ; bottom temperature, 34°·2.

Station 157, March 3, 1874 ; lat. 53° 55′ S., long. 108° 35′ E.; depth, 1950 fathoms ; Diatom ooze ; bottom temperature, 32°·1.

Station 158, March 7, 1874 ; lat. 50° 1′ S., long. 123° 4′ E.; depth, 1800 fathoms ; Globigerina ooze ; bottom temperature, 33°·5.

Distribution.—The geographical distribution of this form is very remarkable, ranging, as it does, within the limits of well nigh the same region in both hemispheres, and not occurring in the intermediate tracts of the ocean. As it cannot be reasonably assumed that the species has originated independently in both hemispheres, the physical condition of the sea-bottom must at some time or other have been more uniform than at present, to have admitted of the species spreading over a much more extensive area, whereas at a later period essential changes in the climatological conditions must be assumed to have caused this form to withdraw successively from the equatorial region towards the two poles, thus dividing the species into two widely separated stocks, inhabiting corresponding regions in both hemispheres. Another fact, too, viz., the remarkable occurrence, as stated above, of the northern form, *Lophogaster typicus*, M. Sars, in the Southern Ocean, without its being ever met with in the intermediate tracts, may also warrant the assumption of essential changes in the physical conditions of the sea-bed having taken place at some former period, thus causing the occurrence of certain species to appear discontinuous.

44. *Boreomysis obtusata*, G. O. Sars (Pl. XXXIII. figs. 1–6).

Boreomysis obtusata, G. O. Sars, Preliminary Notices on the Challenger Schizopoda, No. 42.

Specific Characters.—Male :—Anterior part of carapace not keeled above nor forming any distinct rostral projection, the frontal margin being broadly rounded, with but a very slight angle in the middle ; antero-lateral lobes sharply pointed. Eyes well developed, rather short and broad, almost circular, cornea greatly expanded, with reddish pigment. Antennular peduncle rather stout, with second joint very short, discoidal. Antennal scale oblong, tapering, apex narrowly truncate, denticle of outer corner but slightly projecting. Propodal joint of legs subdivided into three distinctly defined articulations.