

2. *Chermes abietis* Linn. This is a green-winged species developing in a "pine-apple gall" particularly numerous on white and Norway spruces and ovipositing on the same species of tree on which the galls are found.

3. *Chermes similis* Gillette. A reddish brown species producing an irregular gall on Norway, black, red and white spruces in Maine and ovipositing on the same species of tree on which the galls are found.

4. *Chermes floccus* n. sp. A species developing in a gall on black and red spruce and migrating to the needles of the white pine where it oviposits. A considerable amount of wax is secreted by this species and living specimens can readily be distinguished from *pinifoliae* by this character alone. Both the galls and the insects are structurally very distinct from *pinifoliae*. The antennae of this species are characterized by the exceedingly large sensoria on joints III, IV, V. Each sensorium comprises the entire surface of the joint except the extreme proximal and distal portions and a narrow ridge connecting these.

5. *Chermes consolidatus* n. sp. This tiny species produces a small pale green or pinkish gall on the black or red spruce and migrates to the larch. It is the smallest of the *Chermes* found producing galls in Maine. The antennae are distinctive, the constriction between joints III, IV and V not being so conspicuous as in the other five species, so that these three joints appear almost like a single joint in some specimens.

6. *Chermes lariciatus* n. sp. This species produces somewhat russet colored galls on white spruce and migrates to larch needles to oviposit. The freshly molted migrants have the prothorax and abdomen light yellowish brown, head and thoracic lobes dark, legs and antennae greenish, wings conspicuously green with yellow proximal portion.

These six *Chermes* with galls and photographic details will be included in the exhibit of the Entomological Society of America in Boston.

SPIDERS IN WINTER FLOODS.— On February 10, 1909, there was a heavy rain which flooded low fields and the borders of swamps and ponds and on the 12th I went to Tyngsboro, Mass., and joined Mr. Frederick Blanchard in a hunt for spiders and Coleoptera on the ice. The thermometer had fallen to 14 in the night but the day was calm and became slowly warmer. In the open fields the water had partly drained away leaving thin ice on which spiders were scattered, most of them being near the line of dust that marked the highest water. On the larger ponds and swamps they

were still more numerous around the banks and along lines of rubbish that had floated together on the ice. A few had died and were frozen in the ice, others were frozen down by the feet but were still alive and thawed out later in the day. Nearly all however were free on the ice which along the edges of the floods had frozen under them. They were too cold to move but as the air became warmer revived and groped slowly about without any definite direction. By noon some of them became quite active and climbed grass and bushes and spun threads, the thermometer at this time being 35 in the shade and 40 to 50 in the sun. The most active species was the little *Zmeticus terrestris* which was abundant in a maple swamp on the ice and in bushes up to a foot from the ground. The greater number of spiders were young Lycosidae of all the common species. With the spiders were great numbers of Coleoptera and several species of Diptera. Following is a list of the Spiders.

Adults. *Pachygnatha brevis*, *Pedanostethus riparius*, *Pholcomma rostrata*, *Ceratinella laetabilis*, *Carnicularia indirecta*, *Grammonata ornata*, *Tmeticus plumosus*, *Tmeticus terrestris*, *Tmeticus concavus*, *Erigone dentigera*, *Bathyphantes zebra*, *Diplostyla nigrina*.

Immature. *Singa variabilis*, *Linyphia clathrata*, *Tetragnatha extensa*, *Asageva americana*, *Pirata piraticus*, *Pardosa nigrapalpis*, *Pardosa glacialis*, *Lycosa frondicola*, *Lycosa kochii*, *Lycosa relucens*, *Lycosa lepida*, *Gnaphosa conspersa*, *Prosthemia atra*, *Xysticus lunbatus*, *Dalomedes sexpunctatus*.

J. H. EMERTON.

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