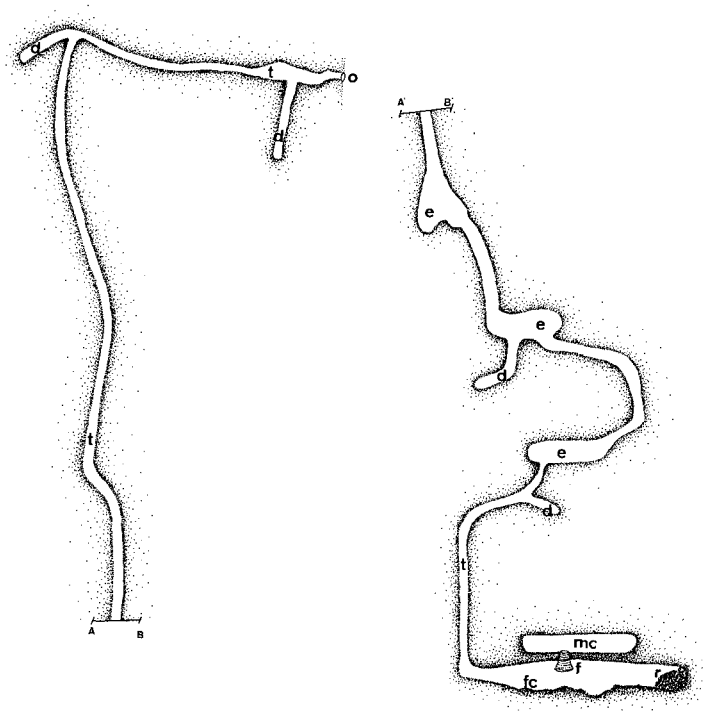


**Figure 4.** Sectioned diagram of a natural nest of *S. vizottoi*. Opening (o) to an inclined earth surface, expansions (e), dead ends (d), tunnels (t), first chamber (fc), funnel (f), refuse (r), and main chamber (mc). See text for the measurements

about 30 cm. There he found, in separate groups, 22 winged and 7 wingless females, immatures in all stages and a pile of 169 "small round white balls", besides about 300 workers. These eggs, although homogeneous in size and color, were much larger than the ones found in the first nest. The collector described the ants as moving very slowly, even when disturbed.

Both colonies were brought to the museum laboratory and transferred to two similar artificial gypsum nests; an attempt to reproduce the natural nest architecture, although horizontally developed.

Colony 1 workers constructed a funnel linking the chambers, quite similar to the one we found in natural conditions. We let a diplopod enter the first chamber, where it remained for days, never succeeding in entering the chamber of the queen and immatures. The workers in the first chamber tried many times to push it back, using their flattened heads as shields. Some *Collembola* once entered the artificial nest from the earth box, and reached the first chamber, where they fed on the refuse, but never succeeded in entering the main chamber. We believe then that the funnel has a defensive function, excluding soil arthropods.