



TEXT-FIG. 10.—Fig. 64—Protoconch width range in samples involving the previously confused species *P. ponsonbyi* and *P. giveni*. The increased range south of the Auckland Isthmus is due to the presence of both species. Numbers of specimens examined are indicated. The localities are as follows: 1 Oruaiti, 2 Kaeo, 3 Peria, 4 Otangaroa, 5 Ahipara, 6 Herekino, 7 Mangamuka (tops), 8 Mangamuka Bridge, 9 Waiare, 10 Mitimiti, 11 Motukaraka, 12 Waipapa, 13 Paihia, 14 Aramahoe, 15 Kaikohe, 16 Omapere, 17 Oue, 18 Tautoro, 19 Mangakawhia, 20 Waipoua Forest, 21 Maunganui Bluff, 22 Helena Bay, 23 Bream Head, 24 Parakao, 25 Paparaoa, 26 Maungaturoto, 27 Kaiwaka, 28 Wellsford, 29 Warkworth, 30 Pukapuka, 31 Silverdale, 32 Piha, 33 Waitakere, 34 Titirangi, 35 Clevedon, 36 Kawakawa Bay, 37 Pollok, 38 Maramarua, 39 Coromandel Peninsula (North), 40 Coromandel Peninsula (South), 41 Mercer, 42 Pukekawa, 43 Te Aroha, 44 Pukemiro, 45 Te Kawa, 46 Kawhia, 47 Te Mata, 48 Kaimai, 49 Te Araroa, 50 Taneatua, 51 Okere, 52 Rotoma, 53 Waiioeka Gorge, 54 Te Kuiti, 55 Turangakumu, 56 Awakino Gorge, 57 Mt. Messenger, 58 Tarata, 59 Kai Iwi, 60 Palmerston North, 61 Paraparaumu.

suspect a useful specific character in the riblet count of the third whorl, a situation not borne out by studies involving a greater amount of material.

#### SHELL SIZE AND SHAPE

The following generalizations are far from infallible but are included to aid macroscopic separation of the species. *P. ponsonbyi* specimens attain a slightly greater size than is usually encountered in *P. giveni*, and in maturity are perhaps a little taller. The umbilicus is also larger in *P. ponsonbyi*.

#### COLOUR PATTERNS

Tessellation of the base is a common character of *P. ponsonbyi*, and is seen only occasionally in *P. giveni*. In *P. ponsonbyi* pale specimens almost devoid of markings occur fairly commonly as do uniformly brownish specimens.