

Genus 2. *Pheronema*, Leidy (Pls. XLII.–XLVI.).*Holtenia*, Wyv. Thomson.

1868. Leidy, Proc. Acad. Nat. Sci. Philad., p. 9 (*Pheronema annæ*).
 1869. Wyville Thomson, Ann. and Mag. Nat. Hist., vol. iv. p. 112.
 1869. Wyville Thomson, Phil. Trans., vol. clix. p. 707 (*Holtenia carpenteri*).
 1870. Leidy, The American Naturalist, vol. iv. p. 17 (March) (*Pheronema annæ*).
 1870. Kent, Monthly Micr. Journ., p. 243.
 1870. Kent, Ann. and Mag. Nat. Hist., vol. vi. pp. 182–186. { *Pheronema carpenteri* and
 1870. Gray, Ann. and Mag. Nat. Hist., vol. vi. pp. 309–312. { *Pheronema grayi*.
 1870. Schmidt, Die Spongien des atlantischen Gebietes (*Holtenia pourtalesii*).
 1871. Carter, Ann. and Mag. Nat. Hist., vol. vii. pp. 112–141.
 1871. Ehlers, Zeitschr. f. wiss. Zool., Bd. xxi. p. 540.
 1872. Gray, Ann. and Mag. Nat. Hist., vol. ix. pp. 442–461.
 1873. Carter, Ann. and Mag. Nat. Hist., vol. xi. p. 234.
 1873. Carter, Ann. and Mag. Nat. Hist., vol. xi. p. 275.
 1873. Carter, Ann. and Mag. Nat. Hist., vol. xii. p. 349.
 1874. Meyer, Ann. and Mag. Nat. Hist., vol. xiii. p. 66.
 1874. Gray, Ann. and Mag. Nat. Hist., vol. xiii. p. 284.
 1875. Carter, Ann. and Mag. Nat. Hist., vol. xv. p. 113.
 1875. Carter, Ann. and Mag. Nat. Hist., vol. xvi. p. 1.
 1875. Marshall, Zeitschr. f. wiss. Zool., Bd. xxv., Suppl., p. 142.
 1876. Marshall, Zeitschr. f. wiss. Zool., Bd. xxvii. p. 113.
 1877. Zittel, Abhandl. d. baier. Akad. d. Wiss.
 1877. Marshall and Meyer, Mittheil. d. Zool. Mus. in Dresden.
 1877. Wyville Thomson, The Atlantic.
 1880. Schmidt, Spongien des Meerbusens von Mexico.
 1880. Norman, Ann. and Mag. Nat. Hist., vol. vi. p. 430.
 1881. Milne-Edwards, Comptes rendus, vol. xciii.; Ann. and Mag. Nat. Hist., vol. ix. p. 37.
 1881. Duncan, Journ. Roy. Micr. Soc., ser. 1, p. 173.
 1881. Carpenter, The Microscope.
 1885. Filhol, La vie au fond des mers, p. 285 (*Pheronema parfaiti*).

History.—In 1868¹ Leidy made a report on a sponge from Santa Cruz, which presents an oval form about 3 inches in size, and bears on one extremity a tuft of siliceous spicules about 2 inches in length, and differing from that of *Hyalonema* only in its smaller size. Afterwards he described this new form more accurately under the name of *Pheronema annæ*,² and he repeated his communication in 1870 in a paper illustrated by woodcuts and entitled Remarks on some Curious Sponges.³ The latter description ran⁴ thus:—“The body of the sponge is oblong ovoidal, with one side more protuberant than the other. The narrower extremity, which I suppose to be the upper, is conical, and its truncated apex presents a single circular orifice, the third of an inch in diameter. The opposite extremity is rather cylindrical, with a broad, slightly rounded

¹ Proc. Acad. Nat. Sci. Philad., 1868, p. 9.² Proc. Acad. Nat. Sci. Philad. (1868).³ American Naturalist, vol. iv. pp. 17–22, fig. 1.⁴ Loc. cit., pp. 21, 22.