

228. *Hastula inconstans* (Hinds, 1844)

(Pl. 58, figs. 228a-c)

(Color pl. A; D, fig. 4)

- 1844 *Terebra inconstans* Hinds, Proc. Zool. Soc. Lond. pt. 11:156; 1844 Hinds in Sowerby, Thes. Conch. 1:179, pl. 44, fig. 83; 1952 Tinker, Pacific Sea Shells 2:192, figs. upper row and center pair 2nd row; 1984 Aubry, Terebridae pl. 2.
- 1844 *Terebra cinerea* Hinds in Sowerby, Thes. Conch. 1: pl. 45, fig. 130 (non *Buccinum cinereum* Born, 1778).
- 1860 *Terebra aciculina* (pars), Reeve, Conch. Icon. 12: pl. 23, fig. 121B only [non Lamarck, 1822].
- 1877 *Terebra (Hastula) confusa* E. A. Smith, Ann. Mag. Nat. Hist. ser. 4, 19:229 [nom. nov. pro *T. cinerea* Hinds in Sowerby, 1844].
- 1966 *Impages inconstans* (Hinds), Habe & Kosuge, Shells World Color col. 2:98, pl. 39, fig. 2; 1975 Okutani, Gakken Illust. Nat. Encyclo. Moll. Japan p. 154, fig. 5.0
- 1978 *Hastula inconstans* (Hinds), Cernohorsky, Trop. Pacific Marine Shells p. 149, pl. 53, fig. 6; 1978 Salisbury, Hawaiian Shell News 26(8):9, text fig. p. 10; 1979 Kay, Hawaiian Mar. Shells p. 387, fig. 126b; 1982 Abbott & Dance, Compendium of Seashells p. 275.

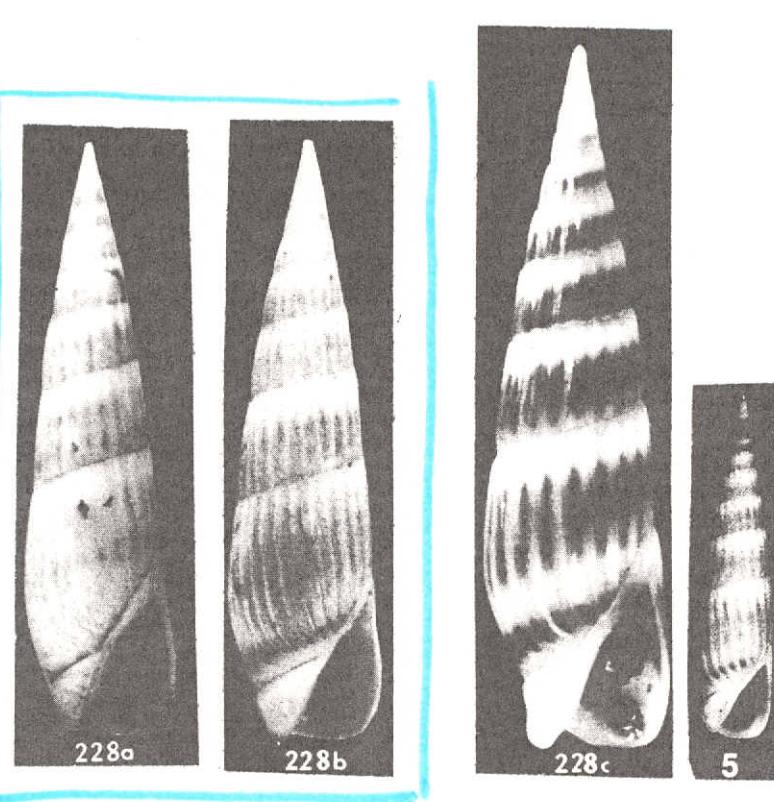
**Description:** Shell to 35 mm; color variable, shiny, pale blue-gray, beige, or brown, striped with light cream, dark brown, or both, sometimes axially streaked with brown; outline of whorls straight; protoconch of 3½ conical whorls; subsutural band and groove absent; axial ribs strong, straight, evenly spaced, from suture to suture, about 22 to 27 on penultimate whorl; spiral sculpture absent; body whorl elongate; outer lip almost triangular, flared at anterior, pointed at posterior; columella straight, with ridged parietal callus on mature specimens.

**Type locality:** "Hawaiian Is."

**Distribution:** Hawaiian Is.

**Type:** Lectotype BM(NH) no. 1968243; 33.2 mm.

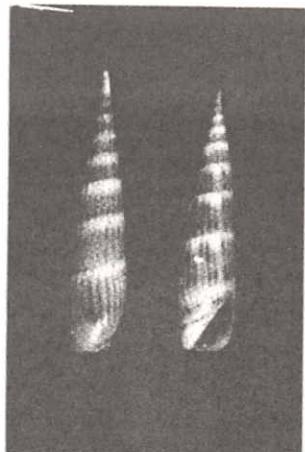
**Discussion:** This species has planktonic development, the veligers hatching when one whorl is complete. They add two and a half more whorls before settling. (J. B. Taylor, unpubl. Ph.D. thesis). *H. inconstans* is prey specific, using its radula to inject toxin into the polychaete, *Dispia magna*, on fine sand beaches in the surf. (B. A. Miller, 1970). See *H. stylata* (227) for comparison.



FIGS. 228a-c, *Hastula (Impages) inconstans* (Hinds). 228a, Lectotype British Museum (N.H.) No. 1968243; 33.2 mm. 228b, Paralectotype same Institution; 32.6 mm. 228c, Barber's Pt., Oahu, Hawaii, 18 m; 22.0 mm.

5: *Hastula inconstans* (Hinds); Hawaii; 28.6 mm. (sp. 228).

Aug 78



Inconstant Auger (1") 2.5 cm  
*Hastula inconstans* (Hinds, 1844). Hawaiian Islands. Steep sand beaches; locally common.

Compensior p275



T. INCONSTANS  
(Hinds, 1844) 30  
mm., Hawaii. In ac-  
qua basse.

AUG 21 1978

SEE ..

3. *TEREBRA (Hastula) INCONSTANS* Hinds.  
Japan, Haw. <30-35-40-50mm. C. E. S. 21

INCONSTANS. *Ter. testa obeso-subulata, acuminata, livida*  
*da, polita; anfractibus integris, subrotundatis, longitro- catis, interstitiis levigatis; infra suturam et ad basin an- ultimi pallide fasciatam; apertura effusa; columella truncata, ubcallosa. Axis 16 lin.*

Sandwich Islands.

ming.

This species has much of the general character of *T. anomala*, but the whorls are constantly entire, and the shells are more acuminate

H-442 p158

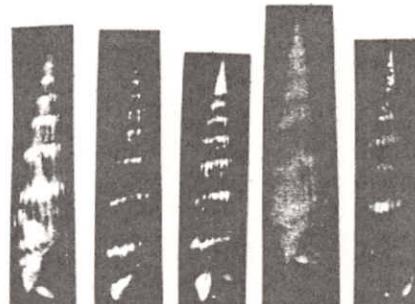
##### 5. *T. INCONSTANS*. (pl. xliv. f. 83.) Hinds, l. c. p. 156.

*Testa obeso-subulata, acuminata, livida vel pallida, polita; anfractibus integris, subrotundatis, longitrusum plicatis, interstitiis levigatis; infrà suturam et ad basin anfractus ultimi pallide fasciatam; apertura effusa; columella truncata, tunc producta.*

This species has much of the general character of *T. anomala*, but the whorls are constantly entire, and the shells are more acuminate and obese. Pale markings are sometimes present in the interstices of the delicate sharp folds.

Sandwich Islands, where it abounds in the sands in considerable numbers.

H-442 p179 pl. XLIV f. 83.



Upper Row; Second Row, Center Pair

##### THE VARIABLE AUGER SHELL

##### *Terebra inconstans*

This species is covered over the outer surface of the shell by longitudinal angular ridges or plications. It has a wide flature and lacks the encircling spiral groove anterior to the suture found on many of these shells. The color of this species is variable but is usually of a chocolate, ash, or bluish color with band encircling the suture; it will vary in intensity from light to dark.

This auger shell is distributed from the Hawaiian Islands throughout Polynesia, across the entire tropical Pacific Ocean, and the East Indies.

This is an extremely variable species which is somewhat difficult to identify. It is found in books under a variety of names.

T. inconstans

*T. inconstans*, Hinds, l. c. fig. 83 (Reeve, l. c. typical, c. var.), is recognized, in the first place, by its broader form, then by the greater coarseness of the plications, which are produced to the base of the last whorl, but especially, by the presence of a thick plication situated on the middle of the columella within the aperture.

SMITH 18

##### 1. *TEREBRA INCONSTANS*, Hinds.

*terebra inconstans*, Hinds, Thes. Conch. p. 179. no. 85, pl. 44.

3.

Tab. Iles Sandwich.

D-264 1859 p291

*inconstans*, *Terebra* - HINDS, 1844, P. Z. S. L., p. 156. Hab. Sandwich Islands. Coll. Cuming. Size: 16 lin. (= 36.0 mm.). Lectotype no. 1968243: 33.2 mm.; syntypes: 33.1 mm. and 32.6 mm.

C64

(*Hastula*) *inconstans* (HINDS, 1844): Proc. Zool. Soc. London for 1843: 156; Fig.: HINDS in SOWERBY, 1844, Thes. Conch., T., pl. 44, fig. 83.

\* *T. aciculina* REEVE, 1860: Conch. Icon., T., pl. 23, (in part), figs. 121 b, 121 d, 121 e (non LAMARCK, 1822).

*H. confusa* E. A. SMITH, 1877: Ann. & Mag. Nat. Hist., p. 299; Fig.: REEVE; Conch. Icon., 1860, T., pl. 23 (in part), fig. 121 d; (non vars. 121 c, 121 f).

*T. inconstans confusa* PILSBRY, 1921: Marine Moll. Hawaii, p. 301.

BUREAU

Specimen in Batangas Bay, Luzon (B no. 441).

Terebra inconstans Hinds

Hinds Proc Zool Soc London 1843 p 156. Sowerby thes I p 179 pl 44 fig 83. T. aciculina var Kiener iconogr pl 7 fig 13<sup>a</sup>. Reeve conch ic fig 121<sup>b</sup>, 121<sup>c</sup>. T. strigilata var Kiener ibid pl 9 fig 18<sup>a</sup>-<sup>c</sup>. T. anomala Gray Pease Am Journ Conch IV 1868 p 124.

Nah verwandt mit cinerea Born = aciculina Lam. aber, wie es scheint, durch stärkere scharfrückige Falten verschieden, welche die ganze Höhe der letzten Windung einnehmen und nahe der Naht nicht so deutlich gebogen sind. Bald sehr blass, fast rein weiss, bald dunkel-violett mit weisser Nahtbinde und blassem Band an der Basis. Solche Exempl. lagen in unserer Sammlung unter dem Namen T. aciculina (Sandwich Inseln). Sie erinnern auch an strigilata, unterscheiden sich aber in der Sculptur; denn bei strigilata sind die Falten flach-rückig und dicht neben einander, bei inconstans scharfrückig und durch mindestens ebenso breite Zwischenräume getrennt. T. anomala Gray dürfte nach Sowerby thes fig 97 und Reeve's fig 121<sup>a</sup>-<sup>c</sup> zu urtheilen nicht zu inconstans, sondern zu cinerea gehören. In der Form der Mündung scheint zwischen beiden kein wesentlicher Unterschied zu bestehen nach direkter Vergleichung unserer Exempl. von den Sandwich Inseln mit brasilianischen von T. cinerea. Ob letztere wirklich auch in Singapore und Manila (Sowerby Reeve nach Cuming) vorkommen, müssen wir vorerst noch dahin gestellt sein lassen.

n 25 MARTENS & LANGKAU

Hastula inconstans (Hinds, 1844)

Shell about 30mm in length, shining, sculptured with irregular, low but angulate axial ribs, base of shell with a fasciolar cord, siphonal canal short, outer lip indented posteriorly but broadening anteriorly; this species has no presutural groove and is smooth between the axial ribs. The sutures are white in colour, remainder of whorls brown or greenish-brown, with a slightly paler central band; the colour is most saturated between the axial ribs, and the body whorl has an additional white peripheral band, the aperture is brown and the columella is white.

Uncommon. The species has been reported from the Indo-Pacific but appears to be endemic to the Hawaiian Islands; subtidal. *Terebra confusa* E.A. Smith, 1877, is a synonym.

Plate 53 Figure 6



6. *Hastula inconstans* (Hinds). Hawaiian I. To 1 1/4 inches. P. 149

80. *T. inconstans*, Hinds, variety of *T. aciculina*, Lamarck. RV 1860

Inconstans (Terebra), Hinds. Proc. Zool. Soc., 1843, p. 156.

= *T. aciculina*, Lam. (RV). TRYON 1885, 32

SEE PICTURE AT ALLOCULINA RV.

*Hastula inconstans* (Hinds, 1844). Fig. 126 B. (Synonyms: *Terebra aciculina* Reeve, 1860, in part. *T. inconstans confusa* Smith, 1877, Pilsbry, 1921; *Hastula confusa* Smith, 1877, Weaver, 1960.) Length, 24 mm; diameter, 6 mm. Shell: slender, attenuate; base of outer lip truncate; axial ribs extending the length of the whorls; glossy, white with axial brown streaks or all brown. Spire: protoconch attenuate, inflated, conical to peglike, of three and one-half whorls; suture oblique, constricted, crenulated by the axial ribs. Sculpture: keeled axial ribs approximately equal in diameter to the smooth interspaces and extending the length of the whorls. Aperture: ovate, flared, the outer lip abruptly truncate at the base. Color: variable — white or cream axially streaked with threads or bands of dark brown, sometimes brown with a white band below the suture.

*H. inconstans* occurs on surf-washed beaches with fine, well-sorted sand, gentle slope, and rolling breakers 1 to 2 m in height. B. A. Miller (1970) has described the feeding habits and egg capsules. When feeding, these terebrids "sail" in the surf by means of the large foot. They feed exclusively on the spionid polychaete *Dispia magna*, injecting a toxin into the prey by means of the radular apparatus. Egg capsules are deposited on basalt fragments in the surge area just beyond the zone where the surf breaks. The veligers hatch when one whorl is complete, add two and one-half whorls while planktonic, and settle at columellar lengths of 650 to 850  $\mu\text{m}$  when three to three and one-half whorls are complete (J. B. Taylor, 1975).

*H. inconstans* was described from the Hawaiian Islands and may be endemic. Sowerby (1844), who obtained his information from Hinds, noted that "it abounds in the sands in considerable numbers." The truncate base of the outer lip is characteristic.

A-KAI 1979 p 322



B. *H. inconstans* length 24 mm

Terebra inconstans Hinds  $\times 1.7$   
Shell moderately thin with sharply pointed apex. Distinct spiral groove below suture and coarse, irregular axial ribs. Greyish blotched with brownish streaks; white, spiral band below suture and one spiral band on body whorl. External colour and pattern shows through aperture. 4-5cm. Indo-Pacific. Frequent. DANCE 77 1218