

SMITHSONIAN INSTITUTION  
UNITED STATES NATIONAL MUSEUM  
**Bulletin 91**

---

REPORT ON THE TURTON COLLECTION OF SOUTH  
AFRICAN MARINE MOLLUSKS, WITH ADDITIONAL  
NOTES ON OTHER SOUTH AFRICAN SHELLS  
CONTAINED IN THE UNITED STATES  
NATIONAL MUSEUM

BY

PAUL BARTSCH

*Curator, Division of Marine Invertebrates  
United States National Museum*



WASHINGTON  
GOVERNMENT PRINTING OFFICE  
1915

REPORT ON THE TURTON COLLECTION OF SOUTH AFRICAN  
MARINE MOLLUSKS, WITH ADDITIONAL NOTES ON OTHER  
SOUTH AFRICAN SHELLS CONTAINED IN THE UNITED  
STATES NATIONAL MUSEUM.

---

By PAUL BARTSCH,

*Curator, Division of Marine Invertebrates, United States National Museum.*

---

INTRODUCTION.

Some years ago Lieut. Col. W. H. Turton, D. S. O., late Royal Engineers, presented a collection of marine mollusks from Port Alfred to the United States National Museum with a request for identification and report. The many duties of the staff of the Division of Mollusks and the absence of critically identified material from South Africa for comparison, rendered progress upon this report rather slow. About the time that the first sending was worked up, a second one arrived, and finally a third, each requiring a revision of the previous report. While this does not show in the text of the present paper, it will explain why the figures on the plates which accompany this report are not always in accord, so far as sequence is concerned, with the systematic arrangement of the text. It also explains why the type of illustrations used is not uniform, the line drawings being part of the report as first prepared, while the photographic method of illustration was adopted later.

Col. Turton informs me that he made these collections on four visits to Port Alfred, 1902, 1904, 1905, and 1911, staying there altogether 16 months. "The shells," he says further, "were all found within 10 miles of the village and were secured on the beach, without either dredging or diving." Judging from the fact that in many cases a single specimen only was secured, it seems quite possible that if equally careful collecting were continued in this place, especially if supplemented by dredging, many additions might be made to the already rather remarkable list.

In looking over the collection as a whole one is struck by the prevalence of red coloration, which seems explained by the fact that the red algae form the dominant element in the marine vegetation of the region.

It was deemed advisable to render this report more useful to students by considering with it all the mollusks contained in the United States National Museum from the *South African faunal area*, and while this is not a large series, there are nevertheless among it some very important shells, namely, Gould's "types," obtained by William Stimpson, the zoologist of the North Pacific exploring expedition, at Cape Good Hope, Simons Bay, and False Bay, September 12 to November 9, 1853. These types are now figured for the first time, and a little fuller diagnosis is given of them.

At the end of this paper I have given what I believe to be a list of all the species that have been reported from South Africa of which there are in the United States National Museum no specimens from that region. In this list the type-locality from which the specimens were originally described is cited. It is hoped that this list may serve as a stimulus to future collecting, and that it may also stimulate those authors who have wrongly identified material to review their decisions, which will doubtless result in the expunging of many erroneous records from a list which appears heavily burdened by them.

This report would be incomplete did I not acknowledge my great obligations to Dr. William H. Dall, honorary curator of the Division of Mollusks, for much assistance in its preparation, particularly in the treatment of the part dealing with the bivalves.

I wish also to state that the line drawings of plates 1-6 were made by Evelyn Grosbeck Mitchell, while the photographs were made by Mr. T. W. Smillie, of the National Museum, and retouched by Mrs. E. Bennett Decker. The collection numbers in parentheses are those given by Colonel Turton.

#### SYSTEMATIC LIST.

### Phylum MOLLUSCA.

#### Class CEPHALOPODA.

#### Order DIBRANCHIATA.

#### Family ARGONAUTIDAE.

#### Genus ARGONAUTA Linnaeus.

#### ARGONAUTA ARGO Linnaeus.

Cat. No. 227802, U.S.N.M., one specimen from Port Alfred (Coll. No. 897).

## SIPHONARIA OCLUSUS Krauss.

Cat. No. 115, U.S.N.M., two specimens collected by William Stimpson on the North Pacific Exploring Expedition at Simons Bay. Cat. No. 272111, U.S.N.M., contains another specimen from South Africa.

## Family GADINIIDAE.

## Genus GADINIA Gray.

## GADINIA COSTATA Krauss.

Cat. No. 186649, U.S.N.M., two specimens from Port Alfred (Coll. No. 3).

## Family AMPHIBOLIDAE.

## Genus AMPULLARINA Sowerby.

## AMPULLARINA AFRICANA Smith.

Cat. No. 186650, U.S.N.M., one specimen from Port Alfred (Coll. No. 4).

## Order ORTHODONTA.

## Family TEREBRIDAE.

## Genus TEREBRA Bruguiere.

## TEREBRA CAPENSIS Smith.

Cat. No. 186660, U.S.N.M., three specimens from Port Alfred (Coll. No. 15).

## TEREBRA SUSPENSА Smith.

Cat. No. 186661, U.S.N.M., contains four specimens from Port Alfred (Coll. No. 16).

## TEREBRA DIVERSA Smith.

Cat. No. 18, U.S.N.M., one specimen collected by William Stimpson on the North Pacific Exploring Expedition at False Bay.

## TEREBRA APICITINCTA Sowerby?

Cat. No. 187034, U.S.N.M., one worn specimen which appears to belong here, from Port Alfred (Coll. No. 570). Cat. No. 250410, U.S.N.M., contains a fragment from the same place (Coll. No. 1283).

## TEREBRA, species?

Cat. No. 250483, U.S.N.M., contains a smooth apex of a very small *Terebra*, from Port Alfred (Coll. No. 1356).

## Family CONIDAE.

## Genus CONUS Linnaeus.

## CONUS, species?

Cat. No. 250302, U.S.N.M., contains a worn and bleached specimen of a magnificent cone, having three dark bands; one immediately

beneath the shoulder, one a little posterior to the middle; another on the anterior fourth of the whorls, separated by two light bands; the entire surface is marked also by irregular, vertical zigzag brown markings.

I have been unable to identify this shell with any of the known species, and the specimen is too poor to serve as the type of a new species (Coll. No. 1175).

**CONUS ROSACEUS** Chemnitz.

Seven lots of this species before us are from Port Alfred. Cat. No. 186665, U.S.N.M., three specimens (Coll. No. 20). Cat. No. 227706, U.S.N.M., three specimens (Coll. No. 801). Cat. No. 249645, U.S.N.M., two specimens (Coll. No. 917). Cat. No. 249649, U.S.N.M., one specimen (Coll. No. 921). Cat. No. 249651, U.S.N.M., one specimen (Coll. No. 923). Cat. No. 249652, U.S.N.M., three specimens (Coll. No. 924). Cat. No. 250309, U.S.N.M., one specimen (Coll. No. 1182).

In addition to these, the Museum has two lots from the mouth of Fish River, South Africa. Cat. No. 97983, U.S.N.M., three specimens, and 97984, three specimens. Cat. No. 18799, U.S.N.M., one from Port Elizabeth.

**CONUS AURORA** Sowerby.

Eight lots of this species, all from Port Alfred, are in the collection of the United States National Museum. Cat. No. 249648, two specimens (Coll. No. 920). Cat. No. 249650, two specimens (Coll. No. 922). Cat. No. 249655, two specimens (Coll. No. 927). Cat. No. 249657, one specimen (Coll. No. 929). Cat. No. 250304, one specimen (Coll. No. 1177). Cat. No. 250305, one specimen (Coll. No. 1178). Cat. No. 250306, one specimen (Coll. No. 1179). Cat. No. 250316, one specimen (Coll. No. 1189).

**CONUS LAVENDULUS**, new species.

Plate 1, fig. 10.

Shell obese, with moderately elevated spire. Summits of the whorls separated by well-impressed sutures, moderately rounded, marked by a number of somewhat irregular spiral striations. Entire surface of the body whorl marked by numerous fine, closely spaced, wavy, spiral striations. In addition to these striations, a series of spiral lirations are present on the anterior third of the last whorl, which are a little more closely spaced near the extreme anterior portion. Ground color pale lavender, marbled and variegated with russet-brown. Interior of outer lip purple posteriorly, fading to purplish-white at the anterior margin.

The type, Cat. No. 186973, U.S.N.M., and one other specimen, are from Port Alfred (Coll. No. 505). The type has  $7\frac{1}{4}$  whorls and measures: Length, 36.1 mm.; diameter, 21 mm.

The following additional specimens have been examined: Cat. No. 17985, U.S.N.M., 3 specimens from the mouth of Fish River. Six additional lots, all collected by Colonel Turton at Port Alfred, are as follows: 4, Cat. No. 227709, U.S.N.M. (Coll. No. 804). 3, Cat. No. 249644, U.S.N.M., (Coll. No. 916). 2, Cat. No. 249654, U.S.N.M. (Coll. No. 926). 1, Cat. No. 250303, U.S.N.M. (Coll. No. 1176). 1, Cat. No. 250311, U.S.N.M. (Coll. No. 1184). 1, Cat. No. 250313, U.S.N.M., (Coll. No. 1186).

**CONUS ALFREDENSIS**, new species.

Plate 1, fig. 12.

Shell elongate-ovate, with broadly conic, well-elevated spire. Whorls well rounded at their summit, which is marked by a few feebly incised spiral lines. Sutures well impressed. Posterior half of body whorl smooth, anterior half crossed by oblique, low, rounded, spiral lirations. Lip simple. Columella with a twist a little above its anterior extremity. Color pinkish-white, with irregular blotches, flecks, dots, and streaks of pale ochraceous. Inside of outer lip purplish-white.

The two specimens, Cat. No. 186972, U.S.N.M., from Port Alfred may be considered cotypes. One of these has 7 whorls and measures: Length, 35 mm.; diameter, 16 mm. The other has eight turns and measures: Length, 45 mm.; diameter, 20 mm. (Coll. No. 504). Cat. No. 43144, U.S.N.M. contains three young specimens from the Cape of Good Hope.

**CONUS CAFFER** Krauss.

Seven lots of this species have been examined, all collected by Colonel Turton at Port Alfred. They are as follows:

2, Cat. No. 186665, U.S.N.M. (Coll. No. 20). 4, Cat. No. 227707, U.S.N.M. (Coll. No. 802). 3, Cat. No. 227708, U.S.N.M. (Coll. No. 803). 3, Cat. No. 249647, U.S.N.M. (Coll. No. 919). 2, Cat. No. 249656, U.S.N.M. (Coll. No. 928). 1, Cat. No. 250310, U.S.N.M. (Coll. No. 1183). 1, Cat. No. 250314, U.S.N.M. (Coll. No. 1187).

In addition to these, I have seen four specimens, Cat. No. 98001, U.S.N.M., from the mouth of Fish River, and 1, Cat. No. 43144a, U.S.N.M., from the Cape of Good Hope.

**CONUS GUTTATUS** Kiener.

I have seen four lots of this species, all from Port Alfred, as follows:

2, Cat. No. 249646, U.S.N.M. (Coll. No. 918). 1, Cat. No. 249658, U.S.N.M. (Coll. No. 930). 1, Cat. No. 250307, U.S.N.M. (Coll. No. 1180). 1, Cat. No. 250312, U.S.N.M. (Coll. No. 1185).

**CONUS PICTUS** Reeve.

I have seen five specimens of this species from South Africa, three collected by Colonel Turton at Port Alfred.

1, Cat. No. 186663, U.S.N.M. (Coll. No. 18). 2, Cat. No. 249653, U.S.N.M. (Coll. No. 925). 2, Cat. No. 97986, U.S.N.M. from the mouth of Fish River, South Africa.

**CONUS INFRENATUS** Reeve.

I have seen seven specimens of this species from South Africa, four of which were collected by Colonel Turton at Port Alfred, as follows: Cat. No. 186662, U.S.N.M., two specimens (Coll. No. 17); Cat. No. 250308, U.S.N.M., one specimen (Coll. No. 1181); Cat. No. 250315, U.S.N.M., one specimen (Coll. No. 1188); Cat. No. 97987, U.S.N.M., three specimens from the mouth of Fish River.

**CONUS ALGOËNSIS** Sowerby.

Cat. No. 170, U.S.N.M., one specimen collected by William Stimpson, on the North Pacific Exploring Expedition at False Bay. Cat. No. 18516, U.S.N.M., one from the Cape of Good Hope.

**CONUS BAIRSTOWI** Sowerby.

One specimen, Cat. No. 186664, U.S.N.M., from Port Alfred (Coll. No. 19).

**CONUS CROTCHI** Reeve.

Cat. No. 130748, U.S.N.M., one specimen bearing the general locality South Africa.

**CONUS**, species (?).

Cat. No. 186974, U.S.N.M., contains a specimen too badly worn to be specifically determined, from Port Alfred (Coll. No. 506).

Family **TURRITIDAE**.Genus **CLIONELLA** Gray.**CLIONELLA KRAUSSII** Smith.

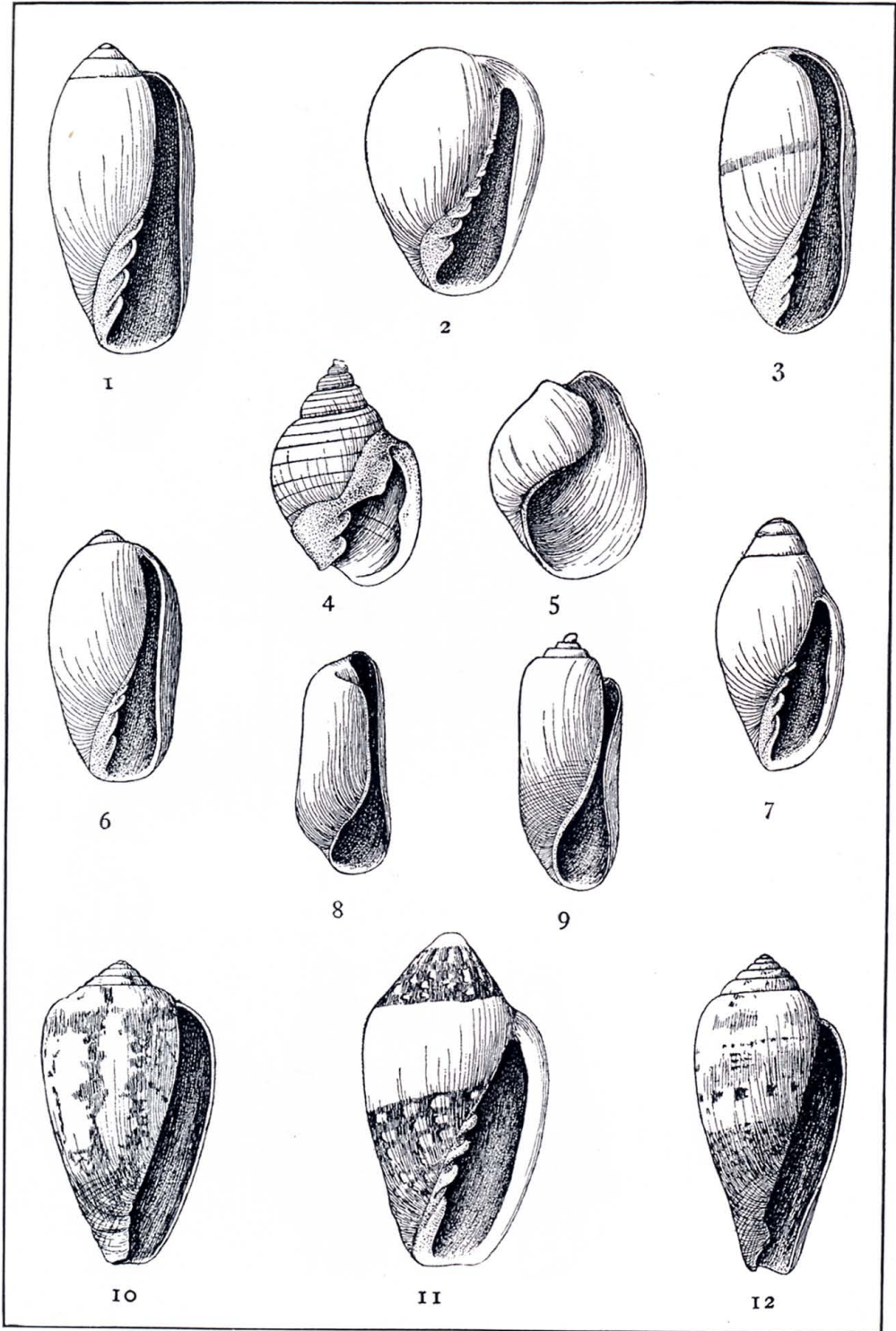
Cat. No. 186666, U.S.N.M., contains two specimens from Port Alfred (Coll. No. 21). Another individual, Cat. No. 21780, U.S.N.M., collected at Algoa Bay, was received from Dunker under the name of *Drillia fucata* Reeve.

**CLIONELLA BIPARTITA** Smith.

Cat. No. 186667, U.S.N.M., contains two specimens of this species from Port Alfred (Coll. No. 22).

**CLIONELLA SUBVENTRICOSA** Smith.

Cat. No. 186668, U.S.N.M., two specimens from Port Alfred (Coll. No. 23). Cat. No. 272115, U. S. N. M. another from South Africa.



SOUTH AFRICAN MARINE MOLLUSKS.

FOR EXPLANATION OF PLATE SEE PAGE 257.



**CONUS PICTUS** Reeve.

I have seen five specimens of this species from South Africa, three collected by Colonel Turton at Port Alfred.

1, Cat. No. 186663, U.S.N.M. (Coll. No. 18). 2, Cat. No. 249653, U.S.N.M. (Coll. No. 925). 2, Cat. No. 97986, U.S.N.M. from the mouth of Fish River, South Africa.

**CONUS INFRENATUS** Reeve.

I have seen seven specimens of this species from South Africa, four of which were collected by Colonel Turton at Port Alfred, as follows: Cat. No. 186662, U.S.N.M., two specimens (Coll. No. 17); Cat. No. 250308, U.S.N.M., one specimen (Coll. No. 1181); Cat. No. 250315, U.S.N.M., one specimen (Coll. No. 1188); Cat. No. 97987, U.S.N.M., three specimens from the mouth of Fish River.

**CONUS ALGOËNSIS** Sowerby.

Cat. No. 170, U.S.N.M., one specimen collected by William Stimpson, on the North Pacific Exploring Expedition at False Bay. Cat. No. 18516, U.S.N.M., one from the Cape of Good Hope.

**CONUS BAIRSTOWI** Sowerby.

One specimen, Cat. No. 186664, U.S.N.M., from Port Alfred (Coll. No. 19).

**CONUS CROTCHI** Reeve.

Cat. No. 130748, U.S.N.M., one specimen bearing the general locality South Africa.

**CONUS**, species (?).

Cat. No. 186974, U.S.N.M., contains a specimen too badly worn to be specifically determined, from Port Alfred (Coll. No. 506).

Family **TURRITIDAE**.Genus **CLIONELLA** Gray.**CLIONELLA KRAUSSII** Smith.

Cat. No. 186666, U.S.N.M., contains two specimens from Port Alfred (Coll. No. 21). Another individual, Cat. No. 21780, U.S.N.M., collected at Algoa Bay, was received from Dunker under the name of *Drillia fucata* Reeve.

**CLIONELLA BIPARTITA** Smith.

Cat. No. 186667, U.S.N.M., contains two specimens of this species from Port Alfred (Coll. No. 22).

**CLIONELLA SUBVENTRICOSA** Smith.

Cat. No. 186668, U.S.N.M., two specimens from Port Alfred (Coll. No. 23). Cat. No. 272115, U. S. N. M. another from South Africa.