

*Ecology*. — The single specimen was taken from a depth of 85 meters.

*Geographical distribution*. — Known only the type locality in the Cape Verde Islands.

***Porcellana longicornis* (LINNAEUS, 1767).**

(Fig. 10, A-E.)

*Cancer hexapus* LINNAEUS, C., 1767, p. 1039.

*Cancer longicornis* LINNAEUS, C., 1767, p. 1040.

*Porcellana longicornis* BOSC, L. A. G., 1801-1802, p. 233. — BOUVIER, E.-L., 1940, p. 177, fig. 35 (1-2), 131, pl. 5, fig. 6.

**Source and material.**

| Collector             | Locality   | Date             | Depth<br>m | Bottom<br>tem-<br>perature<br>°C | Nature | Material                 |
|-----------------------|--|------------------|------------|----------------------------------|--------|--------------------------|
| « MERCATOR »          | Bahia de Pulpito,<br>Rio de Oro                    | 25.XI.1936       | 18-27      | —                                | —      | 2 ♂, 1 ovig. ♀           |
| »                     | Bahia de Pulpito,<br>S. Garnet Head,<br>Rio de Oro | 29-31.X.<br>1935 | —          | —                                | —      | 3 ♀ (1 ovig.)            |
| »                     | 24°39'N-15°W<br>(S. Garnet Head,<br>Rio de Oro)    | 2.XI.1935        | —          | —                                | —      | 1 ♂, 1 ovig. ♀           |
| »                     | Bahia de Caballo,<br>Rio de Oro                    | 2.XI.1935        | —          | —                                | —      | 4 ♂, 6 ovig. ♀           |
| »                     | Villa Cisneros,<br>Rio de Oro                      | 3.XI.1935        | 22         | —                                | —      | 1 ovig. ♀                |
| »                     | 20°53'N-17°02'W<br>(Cap Blanc,<br>Mauritania)      | 9.XI.1935        | —          | —                                | —      | 2 ovig. ♀                |
| »                     | Cap Blanc,<br>Mauritania                           | 9.XI.1935        | 18         | —                                | —      | 19 ♂, 15 ♀<br>(13 ovig.) |
| »                     | Port Étienne,<br>Mauritania                        | 5.XI.1935        | —          | —                                | —      | 1 ♂                      |
| TH. MONOD             | Sao Thiago,<br>Cape Verde Is.                      | 2.XI.1948        | —          | —                                | —      | 2 ♂, 1 ovig. ♀           |
| I. MARCHE-<br>MARCHAD | S. Iles Madeleines,<br>Senegal                     | 29.XI.1952       | 49         | —                                | —      | 2 ♂, 1 ovig. ♀           |
| J. FOREST             | S. Ile de la Madeleine,<br>Senegal                 | 4.III.1953       | 40         | —                                | —      | 1 ♂, 3 ovig. ♀           |
| »                     | SE. Ile<br>de la Madeleine,<br>Senegal             | 25.III.1953      | 35         | —                                | —      | 2 ♂, 1 ovig. ♀           |
| »                     | »  | 25.III.1953      | 40         | —                                | —      | 1 ♂                      |
| —                     | Dakar, Senegal                                     | —                | —          | —                                | —      | 1 ovig. ♀                |

| Collector   | Locality                                | Date         | Depth<br>m                        | Bottom<br>tem-<br>perature<br>°C | Nature | Material                        |
|---|---|--------------|-----------------------------------|----------------------------------|--------|---------------------------------|
| J. FOREST   | Between Dakar<br>and Gorée, Senegal     | 5.III.1953   | 16                                | —                                | —      | 2 ovig. ♀                       |
| J. CADENAT  | Gorée, Senegal                          | 7.VIII.1946  | In shells with <i>Petrochirus</i> |                                  |        | 2 ♀ (1 ovig.)                   |
| »   | »                                       | VIII.1946    | —                                 | —                                | —      | 6 ♂, 4 ♀<br>(2 ovig.)           |
| IFAN-GORÉE  | »                                       | 12.IX.1947   | —                                 | —                                | —      | 1 ♂                             |
| »   | »                                       | 16.IX.1947   | —                                 | —                                | —      | 1 ♂                             |
| »   | »                                       | 23.IX.1947   | —                                 | —                                | —      | 5 ♂, 2 ovig. ♀                  |
| J. CADENAT  | »                                       | 13.X.1947    | —                                 | —                                | —      | 1 ♂, 3 ♀<br>(2 ovig.)           |
| »   | »                                       | 9.V.1948     | —                                 | —                                | —      | 2 ♂, 2 ovig. ♀                  |
| F. PARAÏSO  | »                                       | 14.IV.1950   | 8-10                              | Lobster grounds                  |        | 1 ovig. ♀                       |
| J. CADENAT  | »                                       | 22.VIII.1950 | Lobster traps                     |                                  |        | 11 ♂, 14 ♀<br>(4 ovig.)         |
| F. PARAÏSO  | »                                       | 5.IX.1950    |                                   | »                                |        | 11 ♂, 13 ♀<br>(5 ovig.)         |
| M. KEITA  | »                                       | 6.X.1950     |                                   | »                                |        | 1 ♂, 2 ovig. ♀                  |
| IFAN-GORÉE  | »                                       | 10.II.1951   | —                                 | —                                | —      | 2 ♂, 3 ovig. ♀<br>(1 ♂ figured) |
| »   | »                                       | 19.IV.1951   | Dredged                           |                                  |        | 1 ovig. ♀                       |
| F. PARAÏSO  | »                                       | 22.VIII.1951 | Lobster traps                     |                                  |        | 14 ♂, 9 ♀<br>(2 ovig.)          |
| J. FOREST   | »                                       | 25.II.1953   | 10-11                             | —                                | —      | 4 ♂, 2 ♀<br>(1 ovig.)           |
| »   | »                                       | 25.II.1953   | 10-12                             | —                                | —      | 6 ♂, 2 ovig. ♀                  |
| IFAN-GORÉE  | »                                       | 21.VII.1953  | Piles of bridge                   |                                  |        | 1 ♀                             |
| I. MARCHE-<br>MARCHAD                                     | »                                       | 10.IX.1953   | —                                 | —                                | —      | 4 ♂, 2 ♀<br>(1 ovig.)           |
| —   | »                                       | —            | 14                                | —                                | —      | 1 ♀                             |
| IFAN-GORÉE  | Off Gorée, Senegal                      | 29.XII.1950  | Dredged                           |                                  |        | 1 ♂, 1 ♀                        |
| I. MARCHE-<br>MARCHAD                                     | Near Point M,<br>Senegal                | 12.XI.1952   | 32                                | —                                | —      | 19 ♂, 12 ♀<br>(7 ovig.)         |
| J. FOREST   | S. Gorée, Senegal                       | 4.III.1953   | 30                                | —                                | —      | 15 ♂, 8 ovig. ♀                 |
| I. MARCHE-<br>MARCHAD                                     | »                                       | 30.IX.1953   | 41                                | —                                | —      | 1 ovig. ♀                       |
| »   | »                                       | 27.X.1953    | 42                                | —                                | —      | 1 ♂                             |
| »   | »                                       | 24.XI.1953   | 40-41                             | —                                | —      | 1 ♂                             |
| »   | »                                       | 26.XI.1953   | 25                                | —                                | —      | 3 ♂, 1 ovig. ♀                  |
| TH. MONOD<br>and P. BUDKER<br>« VERS L'HORIZON »<br>St. 9 | 14°39'N-17°23'W<br>(SE. Gorée, Senegal) | 22.I.1941    | 22-34                             | —                                | —      | 4 ♂, 1 ♀,<br>1 moult            |

| Collector   | Locality   | Date         | Depth<br>m | Bottom<br>tem-<br>perature<br>°C | Nature                                      | Material                            |
|---|--|--------------|------------|----------------------------------|---|-------------------------------------|
| J. CADENAT  | NE. Gorée, Senegal   | 19.VIII.1950 | 4-5        | —                                | —   | 3 ♂                                 |
| IFAN-GORÉE  | Behind wreck of<br>« TACOMA », Senegal                             | 28.IV.1953   | 19         | —                                | —   | 3 ♂, 5 ovig. ♀                      |
| I. MARCHE-<br>MARCHAD                                     | Between wreck of<br>« TACOMA »<br>and Bel-Air, Senegal             | 16.II.1954   | 14-16      | —                                | —   | 1 ♂                                 |
| »   | Near Banc<br>du Séminole,<br>Baie de Gorée, Senegal                | 8.XII.1953   | 38         | —                                | —   | 4 ♂, 2 ovig. ♀                      |
| »   | Between Gorée<br>and Thiaroye, Senegal                             | 18.IV.1952   | 15         | —                                | Stones,<br>ascidians,<br>and bry-<br>ozoans | 1 ♂, 1 ovig. ♀                      |
| »   | »  | 1.VII.1953   | 21-22      | —                                | —   | 1 ♂, 1 ovig. ♀                      |
| IFAN-GORÉE  | Off Thiaroye,<br>Senegal   | 29.IV.1953   | 10         | —                                | —   | 1 ovig. ♀                           |
| »   | »  | 22.VII.1953  | 7          | —                                | —   | 35 ♂, 35 ♀<br>(10 ovig.)            |
| « MERCATOR »  | 14°43'30"N-17°20'-<br>17°25'W<br>(NE. Dakar, Senegal)              | 14.XI.1935   | —          | —                                | —   | 100 ♂, 63 ♀<br>(40 ovig.)<br>1 juv. |
| « VERS L'HORIZON »<br>St. 14                              | Banc<br>de la « RESOLUE »,<br>off M'Bao, Senegal                   | 23.I.1941    | —          | —                                | —   | 1 ♂                                 |
| TH. MONOD<br>and P. BUDKER<br>« JEAN-FRANÇOIS »<br>St. 21 | »  | II.1941      | —          | —                                | —   | 3 ♂                                 |
| M. DELAIS   | M'Bao, Senegal   | 7.II.1951    | Dredged    |                                  |   | 4 ♂, 1 ovig. ♀                      |
| I. MARCHE-<br>MARCHAD                                     | S. M'Bao, Senegal  | 11.IX.1953   | 31         | —                                | —   | 1 ♂                                 |
| TH. MONOD<br>and P. BUDKER<br>« CABELLOU »<br>St. 2       | 14°41'N-17°20'30"W<br>(E. Gorée, Senegal)                          | 4.I.1941     | —          | —                                | —   | 1 ♂, 1 ♀                            |
| « JEAN-FRANÇOIS »<br>St. 18                               | Baie de Rufisque,<br>Senegal                                       | 28.I.1941    | —          | —                                | —   | 1 ♂                                 |
| TH. MONOD<br>and P. BUDKER<br>« JEAN-FRANÇOIS »<br>St. 17 | 14°30'-14°37'N-<br>17°13'-17°14'W<br>(SE. Dakar, Senegal)          | 28.I.1941    | —          | —                                | —   | 8 ♂, 4 ♀                            |
| TH. MONOD<br>and P. BUDKER<br>« JEAN-FRANÇOIS »<br>St. 20 | 14°38'30"-14°39'45"N-<br>17°14'-17°14'45"W<br>(SE. Dakar, Senegal) | 1.II.1941    | 15-17      | —                                | —   | 2 ♂, 1 ovig. ♀                      |
| J. FOREST   | N'Gazobil, Senegal   | 19.II.1953   | —          | —                                | —   | 1 ovig. ♀                           |
| J. CADENAT  | Joal, Senegal  | 24.II.1947   | Shore      | —                                | Algae                                       | 1 ♀                                 |
| J. FOREST   | »  | 18.II.1953   | 6          | —                                | —   | 1 ♂                                 |
| »   | »  | 20.II.1953   | 10-11      | —                                | —   | 3 ♂, 1 ovig. ♀                      |

| Collector                                | Locality   | Date        | Depth<br>m | Bottom<br>tem-<br>perature<br>°C | Nature   | Material                                  |
|--|--|-------------|------------|----------------------------------|--|---|
| I. MARCHE-<br>MARCHAD                    | Off Joal, Senegal  | 17.IV.1953  | 15-17      | —                                | —  | 1 ovig. ♀                                 |
| »  | Banc de Faguque,<br>Joal, Senegal  | 15.IV.1953  | 9          | —                                | —  | 1 ♂                                       |
| A. CRÉMOUX<br>« GÉRARD TRÉCA »           | Entrance to Saloum,<br>Senegal   | 6.V.1949    | —          | —                                | —  | 1 ♂                                       |
| « SYLVANA »<br>St. 98                    | 11°38'N-15°49'W<br>(channel between<br>Rouban and Bubaque,<br>Bijagos Is.,<br>Portuguese Guinea) | 12.IV.1913  | 25-30      | —                                | Rock,<br>coral   | 11 ♂, 16 ♀<br>(12 ovig.),<br>1 post-larva |
| « SYLVANA »<br>St. 100                   | »  | 13.IV.1913  | Low tide   | —                                | Rocks  | 2 ♂, 3 ♀                                  |
| « SYLVANA »<br>St. 104                   | Off Rouban<br>and Bubaque,<br>Bijagos Is.,<br>Portuguese Guinea                                  | 15.IV.1913  | 25-30      | —                                | Sand,<br>gravel,<br>rock                                     | 11 ♂, 8 ♀<br>(4 ovig.)                    |
| A. CRÉMOUX<br>« GÉRARD TRÉCA »<br>St. 38 | 10°06'N-14°48'W<br>(French Guinea)   | 4.II.1953   | 25         | —                                | Shelly<br>sand with<br>sponges<br>and<br>gorgonians          | 1 ovig. ♀                                 |
| A. GRÉMOUX<br>« GÉRARD TRÉCA »<br>St. 34 | 9°40'N-14°21'W<br>(French Guinea)  | 3.II.1953   | 25         | —                                | Muddy<br>sand with<br>sponges<br>and gorgo-<br>nians         | 8 ♂, 10 ♀<br>(4 ovig.)                    |
| J. CADENAT<br>« GÉRARD TRÉCA »<br>St. 4  | 9°38'N-13°59'W<br>(French Guinea)  | 23.XII.1952 | 15         | —                                | Sand   | 2 ♂, 1 ovig. ♀                            |
| J. FOREST<br>« GÉRARD TRÉCA »<br>St. 47  | 9°25'N-13°55'W<br>(Off Conakry,<br>French Guinea)  | 12.III.1953 | 15         | —                                | Muddy<br>sand  | 2 ♂                                       |
| J. FOREST<br>« GÉRARD TRÉCA »<br>St. 50  | 9°22'N-13°37'W<br>(Near Conakry,<br>French Guinea)   | 14.III.1953 | 10         | —                                | Sand   | 1 ♂                                       |
| J. CADENAT<br>« GÉRARD TRÉCA »<br>St. 1  | 9°19'N-13°53'W<br>(French Guinea)  | 19.XII.1952 | 23         | —                                | Mud with<br>gorgonians                                       | 1 ♂                                       |
| A. CRÉMOUX<br>« GÉRARD TRÉCA »<br>St. 26 | 9°16'N-13°34'W<br>(French Guinea)  | 27.I.1953   | 10         | —                                | Muddy<br>sand  | 1 ♂                                       |
| A. CRÉMOUX<br>« GÉRARD TRÉCA »<br>St. 27 | 9°16'N-13°38'W<br>(French Guinea)  | 27.I.1953   | 14-15      | —                                | Muddy  | 10 ♂, 10 ♀<br>(8 ovig.)                   |
| A. CRÉMOUX<br>« GÉRARD TRÉCA »<br>St. 28 | 9°16'N-13°42'W<br>(French Guinea)  | 27.I.1953   | 20         | —                                | Gray<br>muddy<br>sand with<br>sponges<br>and gorgo-<br>nians | 2 ♂, 1 ♀                                  |
| J. FOREST<br>« GÉRARD TRÉCA »<br>St. 46  | 9°15'N-14°50'W<br>(Near Conakry,<br>French Guinea)   | 11.III.1953 | 45         | —                                | Sand   | 2 ♂, 2 ovig. ♀                            |



| Collector                               | Locality   | Date        | Depth<br>m         | Bottom<br>tem-<br>perature<br>°C | Nature   | Material                         |
|---|--|-------------|--------------------|----------------------------------|--|----------------------------------|
| I. MARCHE-<br>MARCHAD                   | Conakry,<br>French Guinea                                  | 27.I.1953   | —                  | —                                | —  | 4 ♂, 5 ♀<br>(4 ovig.)            |
| E. POSTEL<br>« GÉRARD TRÉCA »<br>St. 21 | Near Conakry,<br>French Guinea                             | 21.I.1953   | —                  | —                                | —  | 1 ♂                              |
| DEBYSER                                 | Between Kassa<br>and Conakry,<br>French Guinea             | 2.I.1950    | On submarine cable |                                  |  | 4 ♂, 5 ♀<br>(3 ovig.)            |
| J. FOREST<br>« GÉRARD TRÉCA »<br>St. 45 | 9°10'N-14°55'W<br>(French Guinea)                          | 11.III.1953 | 50-45              | —                                | Sand   | 1 ♂, 5 ♀<br>(3 ovig.)            |
| E. POSTEL<br>« GÉRARD TRÉCA »<br>St. 33 | 9°07'N-13°41'W<br>(Mattakong,<br>French Guinea)            | 31.I.1953   | 25                 | —                                | Muddy<br>sand with<br>sponges<br>and gorgo-<br>nians | 5 ♂, 10 ♀<br>(6 ovig.)<br>1 juv. |
| I. MARCHE-<br>« GÉRARD TRÉCA »          | Off Mattakong,<br>French Guinea                            | 21.I.1953   | 10                 | —                                | Muddy<br>sand  | 1 ♂                              |
| J. FOREST<br>« GÉRARD TRÉCA »<br>St. 41 | 1 M. SE. Kassa,<br>French Guinea                           | 9.III.1953  | 15                 | —                                | Muddy<br>sand with<br>hydroids<br>and bryo-<br>zoans | 3 ♂, 2 ♀<br>(1 ovig.)            |
| J. FOREST<br>« GÉRARD TRÉCA »<br>St. 53 | 3 M. NW. Tamara,<br>French Guinea                          | 16.III.1953 | 12                 | —                                | Mud with<br>gorgonians<br>and<br>hydroids            | 1 ♂                              |
| J. FOREST<br>« GÉRARD TRÉCA »<br>St. 56 | Between Tamara<br>and Ile de Corail,<br>French Guinea      | 16.III.1953 | 10                 | —                                | Muddy<br>sand with<br>gorgonians                     | 1 ♂                              |
| J. FOREST<br>« GÉRARD TRÉCA »<br>St. 40 | 9°N-13°50'W<br>(Off French Guinea-<br>Sierra Leone border) | 9.III.1953  | 30                 | —                                | Shell<br>sand with<br>sponges<br>and<br>hydroids     | 1 ♂, 1 ovig. ♀                   |
| R. BASSINDALE                           | 2 M. W. Densu River,<br>Accra, Gold Coast                  | 2.III.1949  | 4                  | —                                | —  | 1 ovig. ♀                        |
| »                                       | 2 M. off Densu, Accra,<br>Gold Coast                       | 8.IV.1949   | 8                  | —                                | —  | 1 ♀                              |
| »                                       | Off Accra,<br>Gold Coast                                   | 21.XII.1950 | 37                 | —                                | —  | 1 ♂                              |
| »                                       | »  | 31.XII.1950 | 35                 | —                                | —  | 1 ♀                              |
| »                                       | »  | 22.I.1951   | 19                 | —                                | —  | 1 ovig. ♀                        |
| »                                       | »  | 24.I.1951   | 25                 | —                                | —  | 1 ♂                              |
| »                                       | »  | 4.IV.1951   | 40                 | —                                | —  | 1 ♂                              |
| »                                       | »  | 2.V.1951    | 37                 | —                                | —  | 1 ♂                              |
| »                                       | Tenpobo,<br>Gold Coast                                     | 17.I.1949   | Inter-<br>tidal    | —                                | —  | 2 ♂                              |
| »                                       | »  | 13.II.1949  | Shore              | —                                | —  | 1 ♀                              |

| Collector                             | Locality  | Date              | Depth<br>m | Bottom<br>tem-<br>perature<br>°C | Nature                    | Material |
|---------------------------------------|---|-------------------|------------|----------------------------------|---------------------------|----------|
| »                                     | »   | 21.XI.1949        | Shore      | —                                | —                         | 2 ♂      |
| »                                     | »   | 6.II.1950         | —          | —                                | —                         | 1 ♀      |
| Expéd.<br>Océanogr. Belge<br>A.S. 32  | 7°17'S-12°42'30"E<br>(13 M. W. Ambrizette,<br>Angola) | 29-30.IX.<br>1948 | 45         | 20,30                            | Rock,<br>gravel,<br>coral | 2 ♂      |
| Expéd.<br>Océanogr. Belge<br>A.S. 116 | 9°20'S-13°04'E<br>(8 M. W. Rio Cuanza,<br>Angola)     | 31.I.1949         | 17         | 24,38                            | Muddy<br>sand             | 1 ♂      |

**Diagnosis.** — Carapace slightly longer than wide, dorsally convex, with regions partially delimited. Surface slightly rugose, most noticeably on posterior branchial regions, and largely bare except for a few symmetrically placed tufts of long, plumose setae. Lateral margins armed with a few spines or denticles. Front deeply divided into three widely separated, dentate lobes, the median much the largest and deeply furrowed in the midline.

Carpus of chelipeds armed on inner margin with two distinct spine-tipped teeth in females and all but largest males. Major chela of males with two large teeth on movable finger and one on fixed finger. Minor chela with fingers strongly curved and twisted and with a dense mat of hairs on opposable margins; fixed finger unequally bifid at tip to receive end of movable finger. Chelae of females similar and less unequal than in males, fingers simple and little bent, without marginal teeth or hairs.

Males in the collection range in size from a carapace length and width of 2.0 and 1.8 mm. to 6.3 and 6.0 mm. The smallest female has the carapace 1.6 mm. long and 1.5 mm. wide; the largest female is ovigerous and has a carapace length of 5.7 and width of 5.9 mm.; the smallest ovigerous female has the carapace 2.4 mm. long and 2.2 mm. wide. As in *P. platycheles africana*, the carapace is slightly broader in females than in males. In young specimens of both sexes, the average length-width ratio is about 1.10; in the largest males it is about 1.04, and in the largest females, 1.00 or less.

**Remarks.** — No constant differences were found between West African specimens of this variable species and those from European coasts. The present collection has a preponderance of male specimens; of 741 specimens in which the sex is determinable, there are 410 males and 331 females. In addition to the striking sexual dimorphism of the chelipeds mentioned above, there appears to be a tendency toward right-handedness in males. Of 118 males in which both chelipeds are intact, the major cheliped is on the right side in 71, on the left in 46, and subequal in 1. In 63 complete females, on the other hand, the major cheliped is on the right side in 25, on the left in 26, and subequal in 12.

**Ecology.** — Along the West African coast, *P. longicornis* has been found from the intertidal zone to a depth of about 50 meters. J. BONNIER (1887) recorded the species from more than 180 meters (100 fathoms), but this depth is probably unusual.

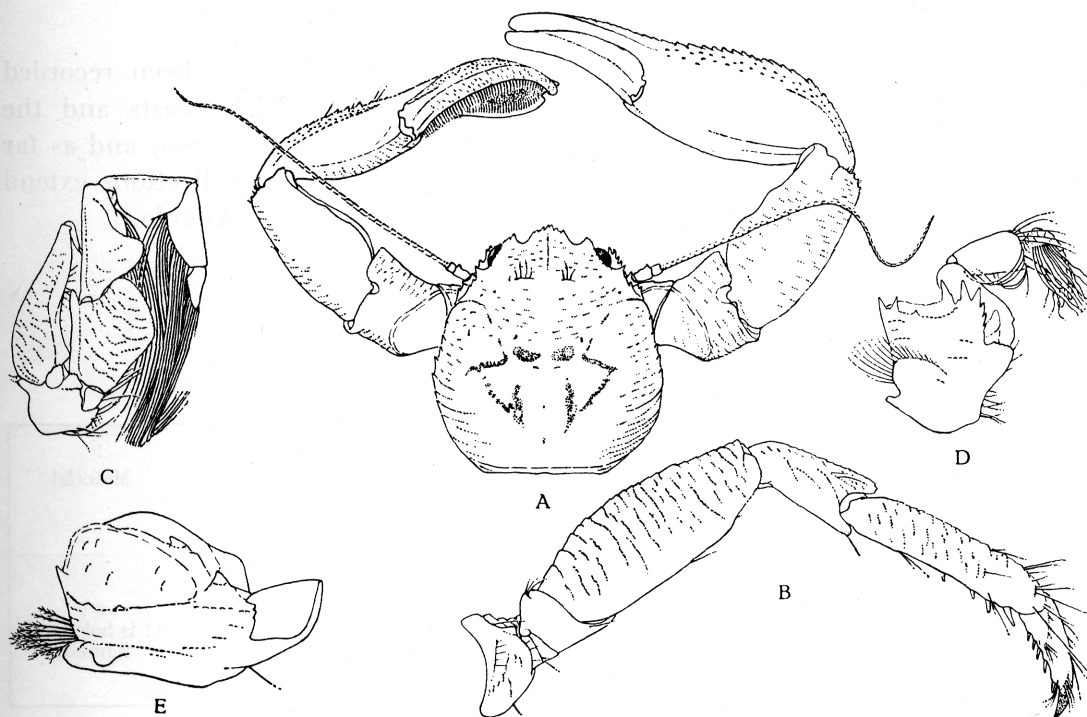


FIG. 10. — *Porcellana longicornis* (LINNAEUS, 1767)

A, carapace and chelipeds. — B, right first walking leg. — C, right third maxilliped.  
D, right antennule in ventral view. — E, same in anterior view.  
Male; Gorée, Senegal; scale: A,  $\times 6.3$ ; B, C,  $\times 13.8$ ; D,  $\times 21$ ; E,  $\times 40$ .

Off West Africa, it has been found on bottoms of mud, sandy mud, sand, gravel, stones, rock, and coral, in association with algae, sponges, hydroids, gorgonians, bryozoans, and ascidians. The studies of E. ALLEN (1899), K. ZIMMERMAN (1913), and E. NICOL (1932) on the occurrence of this common porcellanid off Plymouth, England, indicate that it frequents similar habitats there, where it was taken on bottoms of fine sand, coarse gravel with sand or mud, fine gravel, shell gravel, and stones; it was especially common in *Cellaria* beds and in crevices of *Lepralia*, as well as under stones and in holdfasts of *Laminaria*. In the intertidal zone of the English coast, it is said to avoid thick deposits of mud in crevices where *P. platycheles platycheles* is usually found and it prefers shores where igneous rocks are separated by steep gullies swept clear of mud by tidal currents.

Two specimens were found in a mollusk shell with the hermit crab, *Petrochirus*, at Gorée, Senegal. TH. MONOD (1933) cited a similar association on the Mauritanian coast and he also found specimens of *P. longicornis* on the carapace of the spider crab, *Maja squinado*, in that region.

Ovigerous specimens were taken along the West African coast in every month of the year. At Plymouth, they are found from March to August, according to the publication by the Marine Biological Association (1931). O. PESTA (1918) recorded egg-bearing females from the Adriatic Sea in May and June.

Geographical distribution. — *P. longicornis* has been recorded previously from the Swedish, Norwegian, British, and Irish coasts and the shores of the eastern Atlantic, the Mediterranean, and the Black Sea, and as far south as Cap Blanc on the West African coast. The present collections extend this range more than 1800 miles farther south, to the coast of Angola.

***Porcellana foresti* sp. nov.**

(Fig. 11, A-E.)

Source and material.

| Collector | Locality                          | Date        | Depth<br>m  | Bottom<br>tem-<br>perature<br>°C | Nature | Material                           |
|-----------|-----------------------------------|-------------|-------------|----------------------------------|--------|------------------------------------|
| J. FOREST | Tombo (Conakry),<br>French Guinea | 15.III.1953 | Low<br>tide | —                                | —      | 2 ♀<br>(1 is holotype-<br>figured) |

Types. — The holotype and paratype are deposited in the collections of the Muséum National d'Histoire Naturelle at Paris.

Diagnosis. — Carapace slightly longer than wide; sparsely covered, especially on frontal and lateral regions, with plumose hairs which are easily rubbed off. Surface partially roughened by short, transverse rugae and with a prominent pair on protogastric region. Cervical groove well marked. Orbital margin denticulate, outer angle subrectangular. Lateral margin anterior to cervical groove armed with several larger denticles. Frontal lobes distinctly separated and irregularly spinose. Median lobe furrowed medially, broader than and extending beyond lateral lobes. Lateral wall of carapace entire and provided with a few sinuous longitudinal rugae, the dorsal one forming a prominent crest below antenna. Basal segment of antenna extending forward as a sharp scale nearly to end of cornea.

Chelipeds slightly unequal and unusually robust. Merus dorsally rugose, with a dentate inner lobe and one or two denticles at lower inner distal angle. Carpus strongly rugose dorsally, the rugae being especially prominent in three rather indistinct longitudinal rows. Inner margin irregularly spinose, as is also outer half of distal margin. Outer margin with sharp rugae but no distinct spines. Hand rugose above, pubescent below between bases of fingers.

Outer maxillipeds robust. Meri of walking legs irregularly denticulate or



sparsely spinose dorsally, but not conspicuously so. Dactyls typically armed on lower margin with four movable spines, the proximal one minute and placed close to succeeding one.

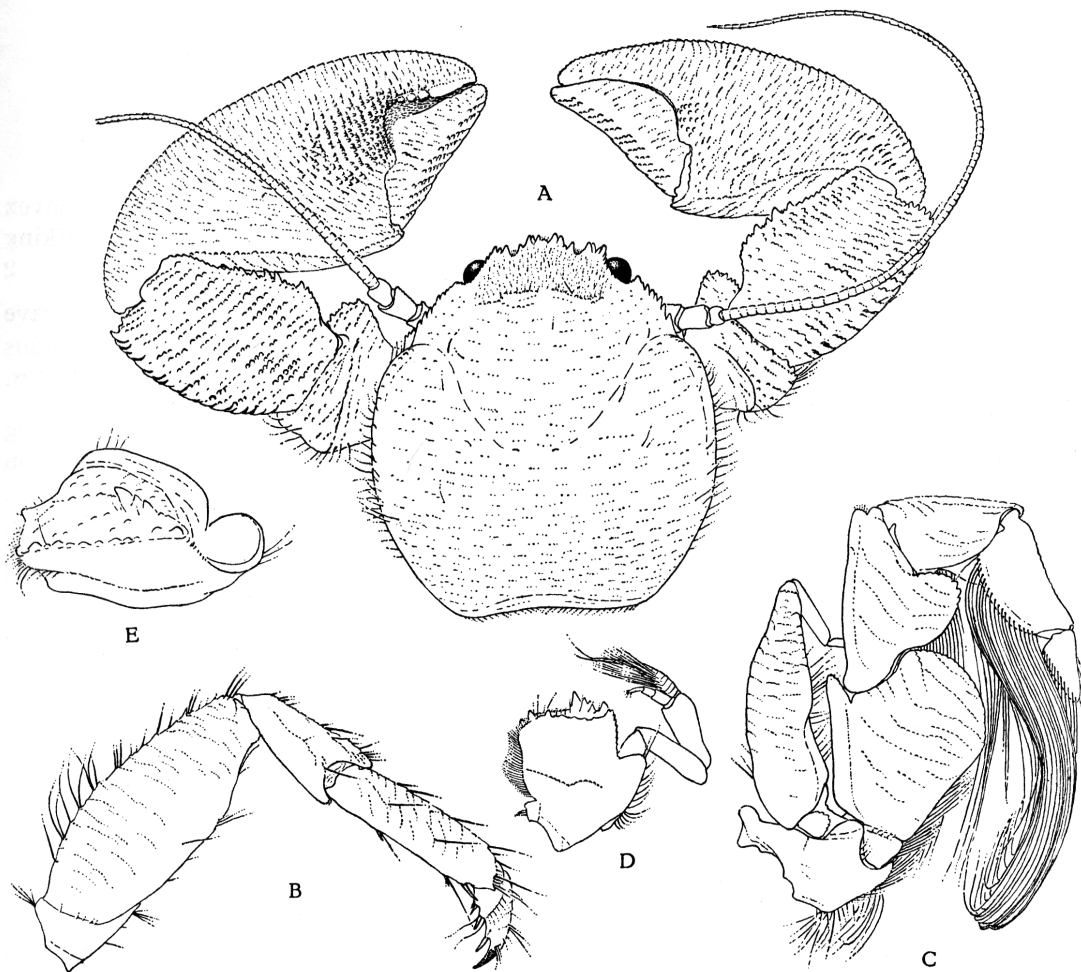


FIG. 11. — *Porcellana foresti* sp. nov.

A, carapace and chelipeds. — B, right first walking leg. — C, right third maxilliped.  
D, right antennule in ventral view. — E, same in anterior view.

Female holotype; Tombo (Conakry), French Guinea;  
scale : A,  $\times 9.6$ ; B,  $\times 13.2$ ; C, D,  $\times 21$ ; E,  $\times 42$ .

The carapace of the female holotype measures 4.8 mm. long and 4.6 mm. wide. The other female is 4.5 mm. long and 4.2 mm. wide.

Remarks. — The robust, subequal chelipeds give this species the appearance of certain species of *Petrolisthes* and readily distinguish it from all other species of *Porcellana*.

It is a pleasure to name this species for the collector, Dr. JACQUES FOREST of the Muséum National d'Histoire Naturelle at Paris, who has contributed in several ways toward the completion of this report.



Ecology. — The only two specimens known were collected at low tide.

Geographical distribution. — Known only from the type locality in French Guinea.

Genus POLYONYX STIMPSON, 1858.

KEY TO THE WEST AFRICAN SPECIES OF *POLYONYX*.

1. Carapace subovate; inner margin of carpus of major cheliped evenly convex throughout; outer surface of chela without tubercles; propodus of third walking leg much more than twice as long as wide ..... 2
- Carapace subrectangular; inner margin of carpus of major cheliped concave proximally, convex distally; outer surface of chela with scattered tubercles; propodus of third walking leg about twice as long as wide ..... *P. quadratus*.
2. Fingers of major chela not bent markedly outward; merus of third walking leg distinctly less than twice as long as wide; propodus with three stout spines on lower margin; dactyl with a single small spine on lower margin behind bifid tip ... *P. bouvieri*.
- Fingers of major chela bent outward distally at an angle of more than 45 degrees; merus of third walking leg about twice as long as wide; propodus with four to nine stout spines on lower margin; dactyl with two small ventral spines behind bifid tip ... *P. senegalensis*.

*Polyonyx quadratus* sp. nov.

(Fig. 12, A-G.)

Source and material.

| Collector                               | Locality   | Date        | Depth<br>m | Bottom<br>tem-<br>perature<br>°C | Nature                         | Material                           |
|---|--|-------------|------------|----------------------------------|--------------------------------|------------------------------------|
| J. FOREST<br>« GERARD TRÉCA »<br>St. 47 | 9°25'N-13°55'W<br>(Near Conakry,<br>French Guinea) | 12.III.1953 | 15         | —                                | muddy<br>sand with<br>hydroids | 1 ovig. ♀<br>holotype<br>(figured) |
| —                                       | Senegal<br>or French Guinea                        | —           | —          | —                                | —                              | 1 ♂                                |
| A. LONGHURST                            | Off Lungi,<br>Sierra Leone                         | 3.II.1955   | 10         | —                                | —                              | 1 ♀                                |

Types. — The holotype is deposited in the Muséum National d'Histoire Naturelle at Paris; the male paratype is in the Institut Français d'Afrique Noire at Dakar and the female from Sierra Leone is in the U.S. National Museum at Washington.