(Continued from page 70.)

NAXIA, Guen.

49. N. xanthodera, sp. nov. ♀. Palpi pale gray, head whitish, collar and patagia reddish-yellow, upper side of thorax brown, upper side of abdomen fuscous, lower side of thorax and abdomen fuscous, legs inconcolorous. The primaries are reddish, glossed with purple and marked on the outer and inner margin with yellowish. They are crossed by a number of obscure and fine waved lines. The secondaries are uniformly fuscous. The fringes are paler, marked with whitish near the outer angle. On the under side, both wings are pale cinereous, the primaries having the inner margin whitish and the outer margin above the inner angle slightly clouded with fuscous. There are a few obscure whitish subapical points forming an incomplete submarginal series in the primaries. Both wings have an obscure discal spot and the secondaries are crossed by curved and regularly crenulate obscure lines, of which the submarginal line is the most distinct. Expanse, 45 mm.

50. N. debilis, sp. nov. ♀. Allied to N. senior, Walk., but smaller and much paler. In N. senior the outer third is dark succeeded on the margins by a whitish area. In N. debilis the outer third of the wing is very little darker than the rest of the wing, and on the under side the lines, which traverse the wings in N. senior are much paler. The expanse of wings in N. senior is from 55 to 60 mm. In the case of N. debilis it is only about 40 mm.

This may be a small and light colored form of N. senior, but its facies is different, though it is very hard to define in words just wherein the difference consists. It seems to be common and constantly occurring in the same localities and at the same time of year with Walker's species.

51. N. multilinwata, sp. nov. ♀. Palpi, front, and collar rufous. Upper side of thorax and abdomen fuscous. Lower side of abdomen fuscous; lower side of thorax paler. The legs are dark fuscous, the tarsi ringed with yellowish-white. The primaries are lilacine-brown, crossed by a multitude of dark brown lines, which in strong sunlight show a coppery lustre. Below the apex these lines coalesce and enclose a subtriangular paler area, at the outer extremity of which is a coppery red spot. The secondaries are dark fuscous on the outer margin, which is defined by a fine narrow waved line. At the anal angle are a couple of dark lines alternating with pale grey lines running inwardly toward the middle of the wing. On the under side, the wings are dark fuscous, laved with grayish on the outer margin and at the base, and crossed by a multitude of fine crenulate lines defined outwardly by hastate pale grayish or pale reddish markings, the reddish tint prevailing toward the costa in both wings. The apical extremity of the costa in the primaries is reddish touched with a number of minute light dots. Expanse, 38 mm.

52. N. invicta, sp. nov. ♀. Body and legs uniformly pale fawn. Upper side of primaries and secondaries fawn. Both wings are sprinkled with small dark cinereous scales, and are traversed by a somewhat broad irregularly curved submarginal band of ferruginous. Both are further marked by obscure and irregularly curved and broken sub-basal, median, and limbal transverse lines. On the under side, the primaries are fuscous with the outer margin uniformly paler. The dark area is traversed by a curved limbal and a curved submarginal line. The secondaries are fuscous like the primaries, but the outer pale margin is not so light as in the primaries. These wings have a distinct discal dot and are crossed by four or five parallel curved transverse lines. Expanse, 35 mm. Habitat Benita. Taken in November.
53. P. Africana, sp. nov. ♀. Upper side of thorax and abdomen fuscous, lower side paler, covered in part with whitish hairs. The primaries on the upper side are slaty-brown, crossed by obscure transverse lines and marked on the costa before the apex by a dark brown subtriangular spot, the apex of which pointing inwardly is obtuse, or rounded, and the outer margin defined by a very fine whitish line. The secondaries are of the same color as the primaries marked by a few scattered submarginal dark brown spots, and above the anal angle on the inner margin by a curved brown line. On the under side both wings are paler than on the upper side, especially at the base. Both have a pale discal spot at the end of the cell; both are crossed beyond the cell by an irregularly curved and acutely zigzagged transverse limbal line, followed by a submarginal curved series of pale spots. Expanse, 40 mm.

54. P. imperatrix, sp. nov. ♀. Somewhat larger than the previous species, and with the outer margin of the primaries strongly produced, or angulated, at the extremity of the third median nervule. The upper side of the body is ashy-brown. The lower side is paler, grayish. The primaries upon the upper side are hoary brown crossed by numerous more or less obscure dark lines and series of spots. On the costa before the apex is a large dark brown triangular spot, from the lower or apical end of which several small spots, gradually diminishing in size, extend in a series in the direction of the outer angle. Beyond these spots below the apex is a curved brown shade running from the large triangular brown spot to the outer margin at its middle. The secondaries are colored like the primaries above. The middle of the wing is crossed by a series of fine subhastate brown markings, shaded outwardly by olivaceous-gray, and succeeded by a similar submarginal series of heavier spots, which are most conspicuous on the inner margin near the anal angle. The margins of both wings are marked upon the interspaces by minute dark brown transverse dashes. On the under side, both wings are fuscous with their inner margins and the apex of the primaries grayish. Both are crossed by obscure transverse median, limbal, and sub-marginal lines composed of subhastate markings, which are bordered externally by paler lines and spots inclining to ochraceous. The submarginal series is the heaviest and most conspicuous, the apical extremity on the primaries being broad, and the pale spots being succeeded externally by darker lines, so that they appear as a central bar of light spots upon a broad darker band. Expanse, 47 mm.

55. D. neptunia, sp. nov. ♀. Closely allied to D. joviana, Cram., and D. arcuata, Moore, from the former of which it differs in having the outer margin of the median dark band evenly curved and not excised in the region of the median nervules, and from the latter it differs in having the median band much wider and the sub-basal transverse band very slightly bowed out toward the margin below the cell. D. joviana is found on the western coast of Africa and is represented in my collection. Its facies differs positively from that of this species. The present species is furthermore considerably larger than D. joviana. The differences between this species and the other species described in this paper are most clearly illustrated by the figures on the plates accompanying this article. It is exceedingly difficult among these forms, which are closely allied and yet distinct, to define with words the differences, which consist mainly in the size and in the outline of the transverse bands of the primaries. Expanse, 43 mm.

56. D. plutonia, sp. nov. ♀. Allied to the preceding species, from which it differs in having the dark median band on its inter-
nal margin diffuse and not regularly convex inwardly. Furthermore, the apical dark spot on the primaries is surrounded by a fine pale line and distinctly demarked from the broad brown curved subapical shade, or subapically produced upper angle of the broad transverse median band. In D. joviana, D. neptuna, and D. conjunctura this apical spot fuses with the subapical prolongation of the median band. The submarginal transverse line is obscure.

♀. The female is like the male, but having the submarginal line straight and sharply defined and bordered outwardly by a pale narrow line. Expanse, $\varphi$ and $\varphi$, 42 mm.

57. D. Camerunica, sp. nov. $\varphi$. Head and body on upper and under side fuscous. The primaries on the upper side are pale ashen. The basal third is dark brown, the brown area being regularly defined by a straight line of very dark brown, running from the costa perpendicularly to the inner margin. Beyond the cell, the wing is crossed by a broad median band of dark brown, diffuse inwardly, and externally deeply toothed and scalloped. On the costa before the apex is a paler area, subhastate in form, with the point, which is directed inwardly, very blunt, or rounded. This spot is defined on all sides by a pale gray line, the barbs, which point outwardly, being shaded with dark brown. Just at the apex, located between the barbs of this subhastate spot is a small oval dark brown spot. There are some fine cloudings on the lighter marginal area, just beyond the median band, and on the edge of the wing near the middle of the margin. The secondaries are dark fuscous with the fringes paler, except at the middle of the outer margin, where they are concolorous. On the under side, the primaries are pale fuscous with the fringes somewhat lighter than the body of the wing. There are obscure traces of transverse limbal and submarginal lines, most distinct near the costa. The secondaries are pale fuscous, lighter near the base, crossed by regularly curved and very dentate median and submarginal dark brown lines, defined externally by parallel paler lines. The fringes are as on the upper surface, but a trifle paler. $\varphi$. The female is very like the male. Expanse, 33 mm.

This species somewhat resembles D. (Opheisa) derogans, Walk., but may be at once distinguished by the scalloped and dentate outline of the dark median band on its external margin.

58. D. humilis, sp. nov. $\varphi$. The body is obscure brownish-gray above, paler on the lower side. The legs are concolorous. On the upper side, the primaries are obscure brownish-gray. There is a dark sub-basal band as in the preceding species, margined externally by paler ashen. The wing is crossed by a curved line, running from the apex, convex inwardly, to about the middle of the inner margin. Beyond the cell, this line fuses with a short curved line sweeping from the costa two-thirds of the distance from the base outwardly toward the outer margin. This short curved line and the upper end of the line running from the apex enclose a semi-circular paler subapical area, near the outer edge of which are some exceedingly obscure darker small spots. The secondaries are uniformly fuscous. Both the primaries and the secondaries on the under side are uniformly fuscous. There is a faint trace near the costa on the primaries of a paler transverse limbal line.

♀. The female is like the male. Expanse, 35 mm. Habitat, Valley of the Ogové and the Cameroons.

This and the preceding species are two of the smallest species in the genus.

GRAMMODES, Guen.

59. G. Benitensis, sp. nov. $\varphi$. Allied to G. (Fodinu) euclidicola, Walk., from which it may be distinguished among other things by the absence of the white transverse half-
band at the base, which is so conspicuous in euclidicola. Furthermore, the white lines forming the V-shaped mark, which are conspicuous in euclidicola, in Benitensis do not make an acute angle with each other at the inner margin, but are separated at the apex of the V and fuse with a pale line, or band, which borders the inner margin, running from the base along the whole length of the margin to the outer angle. In other respects this species closely resembles euclidicola. Expanse, 45 mm. Habitat Benita.

60. G. pusilla, sp. nov. ♂. Front pale brown. Thorax and abdomen above and below very pale ochraceous. The primaries are creamy-white, marked by two conspicuous triangular black spots upon the middle of the wing, distinctly separated from each other by a narrow band of the prevalent light ground color of the wing. The innermost of these spots forms a scalene triangle with its base parallel to the inner margin. The outermost spot has its base toward the costa, the base being slightly concave. The apex points to the outer angle; the sides are nearly equal. The margin is slightly clouded with pale wood-brown, and is marked by a number of minute transverse brownish dashes on the interspaces. The fringes are pale, tipped slightly with fuscous. The secondaries are uniformly creamy-white with fuscous near the base and on the outer margin, especially in the neighborhood of the outer angle. The fringes on the secondaries are paler than on the primaries. On the under side, the primaries are pale argillaceous marked with an obscure discal spot, and crossed from the costa by an incomplete transverse limbal and a broader transverse submarginal band of dark fuscous. The secondaries are uniformly pale argillaceous, inclining to ochraceous.

♀. The female is marked very much like the male. Expanse, 3 and 9, 43 to 46 mm. Habitat, Gaboon and Cameroons.

61. T. binaria, sp. nov. ♂. Front and collar fuscous. Upper side of thorax and abdomen fawn. Lower side of thorax and abdomen paler. Legs concolorous with the anterior margins of the first two pairs dark brown. The primaries on the upper side are argillaceous laved on the costa and the outer margin with grayish. There is a small round discal dot at the end of the cell and below the cell are two dark black subtriangular spots with their bases toward the costa and their apices toward the inner margin. The spots coalesce with each other on the line of their bases just below the discal spot at the end of the cell. They are margined externally on the sides of the inner and outer margins with a narrow pale creamy line. There is a dark brownish subapical shade just beyond the outermost spot and some indistinct submarginal cloudings near the outer angle. The margin is marked with minute brown spots on the interspaces. The fringes are concolorous. The secondaries are argillaceous clouded with fuscous near the base and on the outer margin, especially in the neighborhood of the outer angle. The fringes on the secondaries are paler than on the primaries. On the under side, the primaries are pale argillaceous marked with an obscure discal spot, and crossed from the costa by an incomplete transverse median band. The primaries are marked on the upper side entirely lack the two very conspicuous dark black triangular spots on the median area and the secondaries on the under side possess an obscure discal dot at the end of the cell, and are crossed beyond the cell by an incomplete transverse median band. The primaries are marked on the upper side by a dark transverse submarginal shade, running diagonally from the apex to the inner margin two-thirds of the distance from the base.

♀. The female is marked like the male. Expanse, 3 and 9, 43 to 45 mm.
POAPHILIDAE.

Acantholipes, Led.

63. A. triangulifera, sp. nov. ♀. Head and collar dark brown. Upper side of thorax and abdomen fawn. Lower side of thorax and abdomen paler. Legs concolorous with the front margins of the tibiae and femora darker brown. Primaries on the upper side rosy-fawn, darker on the outer margin. On the inner margin beyond the base is a large subtriangular dark brown spot. The apex of this spot points toward the costa, and from it a fine line is continued upwardly to the costa. Beyond the apex of this dark spot in the middle of the cell is a small circular black spot: at the end of the cell, a reniform spot. A fine irregularly curved line runs from the costa above the reniform around toward the inner margin, fusing with the large subtriangular dark spot beyond the base near the point where the first median nervule intersects the outer margin of this large spot. Upon the costa just before the apex is a moderately large subtriangular dark brown spot. The margin is marked by a few linear transverse lines below the apex. The fringes are concolorous. The fringes on the upper side are fuscous, darkest on the outer margin. On the under side, the wings are pale rosy-fawn, the secondaries somewhat lighter than the primaries. Both wings have an obscure discal spot at the end of the cell and both are traversed beyond the cell by an incomplete transverse limbal dark line. Expanse, 30 mm. Habitat Benita.

64. A. detersa, sp. nov. ♀. Front and collar dark brown. Upper side of thorax and abdomen fuscous, lower side slightly lighter. The primaries and the secondaries on the upper side are fawn with the outer margin lighter, inclining somewhat to ochraceous. The only markings on the upper surface of the wings are, on the primaries, a very narrow and indistinct regularly curved sub-basal line followed on the cell by a median dot and an obscure reniform spot, and beyond the latter there is a very narrow and obscure irregularly curved transverse limbal line running from the costa outwardly, passing around the end of the cell, making an inward loop and then running to the inner margin near its middle. On the under side, the wings are pale fawn with the costa of the primaries before the apex and the inner margin laved with light ochraceous. The fringes of the primaries on the under side are darker than the body of the wing. Expanse, 28 mm.

65. A. pustulata, sp. nov. ♀. The body is marked as in the preceding species. The primaries on the upper side are fawn, marked with heavy dark brown spots and fine dark brown lines. On the costa beyond the base is a small oval black spot, about the middle of the costa three small subtriangular spots, on the costa before the apex a large subquadrate spot. There is a circular black spot on the middle of the cell; at the end of the cell a large black reniform spot; on the inner margin beyond the base a large triangular spot, the apex resting upon the middle of the cell, the base covering the inner margin for about one-half of its length, but not quite reaching the point of insertion of the wing. This spot, as well as the reniform, is followed by a fine dark brown line. The secondaries on the upper side are uniformly pale fuscous. On the under side both wings are pale rosy-fawn. The primaries are somewhat darker in the region of the cell and marked at the end of the cell by an obscure transverse discal line. Expanse, 28 mm.

66. A. catoxantha, sp. nov. ♂. Head and collar dark brown. Upper side of thorax pale fawn; upper side of abdomen pale fuscous; lower side of thorax and abdomen very pale ochraceous. Legs concolorous, margined on the tibiae with pale brown. The primaries are luteous, shading on the
outer margin into pale brown marked by a very dark subtriangular spot on the costa before the apex and by a band of dark brown crossing the middle of the wing, more or less obsolete in the region of the costa, very distinct toward the inner margin. The paler costal extremity of this band is interrupted by a sharply defined black dot near the end of the cell, and beyond it by a lunate black spot surrounded by a fine pale creamy line. Beyond this, running from the costa toward the outer angle, which it does not reach, is an incomplete transverse discal line margined internally by a pale creamy line. The secondaries on the upper side are pale luteous, shaded with fuscous on the inner margin. On the under side, both wings are pale luteous with the cell in the primaries and the region about the origin of the median nervules clouded by reason of the reappearance on the under side of the heavy black markings of the upper side. Expanse, 30 mm. Habitat Benita.

67. *A. umbrosa*, sp. nov. ♀. Head and collar dark brown. Upper side of thorax and abdomen fuscous; lower side fuscous, very little paler than the upper side. Legs concolorous. The primaries on the upper side are rosy-brown with a pale ochraceous reniform spot at the end of the cell and a larger ochraceous spot on the inner margin before the outer angle. On the costa before the apex is a dark brown subtriangular spot. A very obscure and narrow sub-basal brown line runs diagonally from the costa to the inner margin, slanting inwardly. A similar line runs from the reniform to the inner margin slightly curved below the reniform and slanting outwardly. Beyond the reniform another fine line runs from the costa toward the outer angle, which it does not quite reach. The margin is marked by a fine dark line. The fringes are slightly darker than the rest of the wing. The secondaries on the upper side are uniformly dark fuscous with the fringes a trifle paler. On the under side, the primaries are fuscous with the costa and the inner margin paler. The secondaries on the under side are pale fuscous, profusely irrorated with minute brownish scales. The fringes of both primaries and secondaries on the under side are darker than the body of the wing. Expanse, 34 mm.

68. *A. transversata*, sp. nov. ♂. Head, collar, thorax, and abdomen brown; under side paler. Primaries on the upper side brown with the basal area and the costa lighter. The costa is marked by three equidistant triangular brown spots and by a moderately large subquadrate brown spot just before the apex. There is a circular black spot in the middle of the cell and a large reniform spot at its end surrounded by a blackish line. A moderately broad dark line runs from the inner margin beyond the base toward the cell, which it reaches a little behind the circular round spot in its middle. A brownish cloud runs from the interior angle of the large subquadrate spot near the apex across the wing in the region of the reniform and is continued beyond the reniform to the inner margin in the form of geminate obscurely defined curved lines. The third of the costal spots, reckoning from the base, is defined externally by a very narrow white line and is produced to the inner margin as a fine irregularly curved and sinuate transverse limbal line. The secondaries are uniformly dark fuscous. On the under side, both wings are fuscous. The primaries have the inner margin pale testaceous, the costa paler than the body of the wing and profusely irrorated with minute brown scales. There is also beyond the cell, an incomplete transverse dark limbal band extending from the costa as far as the origin of the median nervules. The secondaries are a trifle paler than the primaries, inclined to brownish, and profusely irrorated over their entire surface with minute darker scales. The secondaries have an obscure discal spot and an obscure and
incomplete transverse discal line running from the costa inwardly.

♀. The female is like the male. The antennae, however, are simple, as is characteristic of the genus, while those of the male are doubly pectinated. The markings of the female are also more obscure than in the male, and on the under side the transverse bands are obsolete. Expanse, 30 mm.

69. *A. argillacea, sp. nov.* ♂. Resembling the foregoing species, but differing in having the head and collar dark brown, a usual characteristic of the entire group to which there is an exception in *A. transversata*. The upper and lower side of the abdomen together with the legs are pale fuscous. The primaries are fawn on the upper side. There is a conspicuous reniform spot at the end of the cell margined with blackish. The wing is crossed by a curved sub-basal and by a transverse limbal line, the latter strongly angulated near the second median nervule, sweeping inwardly until it nearly touches the reniform below, and then continued downwardly to the inner margin at its middle. The transverse sub-basal and limbal lines are thickened on the costa and appear there as dark brown triangular spots. Between these dark spots about the middle of the wing is an obscure brown dash. On the costa before the apex is a very dark brown sub-triangular spot. The edge of the costa at the apex is marked by a few light dots. The margin is defined by fine blackish transverse dashes on the interspaces. The fringes are fuscous. The secondaries are pale fuscous, the margin defined as on the primaries, the fringes being a trifle paler than the body of the wing. On the under side, both wings are pale reddish-fawn with the fringes darker, and have the area of the cell clouded with fuliginous, and the inner margin pale testaceous. Both primaries and secondaries have an obscure discal spot at the end of the cell. The primaries, furthermore, have above this spot a dark brown mark on the costa; the secondaries beyond the discal spot toward the inner margin, have an obscure and incomplete transverse median band.

♀. The female is marked much as the male, but is generally paler. Expanse, 30 mm. Habitat Kangwe.

70. *H. angulilinea, sp. nov.* ♂. Head, collar, and upper side of the thorax rich velvety black. Upper side of abdomen dark fuscous; lower side of thorax and abdomen pale fuscous. Legs concolorous. The primaries have the ground color wood-brown. On the middle of the cell is a minute round black spot, surrounded by a narrow pale creamy line. On the inner margin beyond the base is a large subtriangular dark brown spot with its apex resting upon the cell, its base on the inner margin. This spot is defined externally by a narrow pale creamy line. On the side of the insertion of the wing this subtriangular spot has its margin concave. In the direction of the outer margin of the wing, this spot has its edge convex and slightly toothed just before the inner margin of the wing. A fine creamy line runs from the costa before the apex inwardly, then sweeps upwardly toward the costa, and turning down again, sweeps outwardly, reaching the inner margin two-thirds of the distance from the base. The wing beyond this fine line is heavily clouded with dark blackish-brown, darkest in immediate proximity to the line, and thence becoming paler outwardly to the outer margin, which is laved with ashen. The margin is defined by minute narrow transverse dashes. The fringes are ashen like the adjoining portion of the wing. The secondaries are uniformly dark fuscous. The fringes a trifle paler. On the under side, both wings are pale fuscous, slightly darker toward the outer margin, and both have an obscure discal spot at the end of the cell. Expanse, 30 mm.
71. *H. (♀) nigribasis.* ♂. The antennae in this species are not so strongly pectinated in the male as in the preceding species. The head and thorax are rich velvety black. The metathorax is clothed with grayish hair. The upper side of the abdomen is dark fuscous. The under side of the thorax and abdomen are dark fuscous. The legs are black. The primaries on the upper side are pale wood-brown with the outer margin irregularly spotted with pale grayish-oliveaceous maculations. At the base of the primaries is a very large and conspicuous velvety black spot coalescing at the base with the black vestiture of the thorax. This spot is rudely triangular with the apex resting on the cell, the side toward the thorax regularly concave, the apex blunt, and the side toward the outer margin convex. Its base rests on the inner margin. It is defined above by a narrow whitish line. The secondaries are uniformly dark fuscous with the costa at the base shining testaceous. The fringes are a trifle paler than the body of the wing. On the under side, both wings are uniformly dark fuscous with the inner margins a little paler.

♀. The female does not materially differ from the male. Expanse, 40 mm.

It may be remarked that the large spot at the base of the primaries in some specimens, which I believe to be truly referable to this species, is reduced and variously modified in form; in a few specimens being almost obsolete. The form shown in the plate is the prevalent form, however, and may be accepted as typical, seven-tenths of the specimens examined by me being marked exactly as is shown in the figure.

72. *H. jactilifera,* sp. nov. ♀. Allied to the preceding species, but very distinct. Head and collar dark velvety black. The upper side of the thorax and abdomen are dark brownish; the lower side of the thorax and abdomen paler. The legs are concolorous, or very little darker than the adjacent parts of the body. The primaries are brown with the costa and the apical one-third clouded with smoky-brown. An acutely pointed and narrow triangular velvety black spot with its base resting on the inner margin is situated beyond the base. The apex which points toward the costa rests upon the middle of the cell. Beyond this spot are some faint and fine transverse paler lines and there is a broad and diffuse pale reniform spot at the end of the cell. The margin is defined by a very fine evenly scalloped dark brown line. The fringes are paler. The secondaries are fuscous with the base and the fringes paler. On the under side, the wings are pale fuscous, lighter on the inner margins and on the costa of the primaries. The secondaries are profusely irrorated with very minute dark scales. Expanse, 35 mm.

73. *B. tenebrosa,* sp. nov. ♀. Head, thorax, and upper side of abdomen dark fuscous; lower side of thorax and abdomen paler grayish. The legs are blackish with the tarsi minutely ringed with whitish. On the upper side the primaries and secondaries are grayish, hoary. The primaries have the costa marked by a number of minute white spots on the edge. They are crossed by very fine and obscure basal, median, and limbal angulated transverse lines. There is also a very fine angulated submarginal line shaded inwardly near the apex by dark reddish-brown spots and succeeded before the apex by parallel fine white lines, separated from each other by a very fine darker line. On the middle of the outer margin and on the margin just at the apex is a dark brown linear transverse line, or dash. The secondaries are traversed by a curved and angulated sub-basal and median fine line. The submarginal markings of the primaries are continued upon the secondaries, and the fringes of the secondaries are pale tinged with ochraceous at the outer