

*ANODONTA DAHOMEYENSIS*.—Testâ lævi, transversâ, subinflatâ, ad latere compressâ, ad basim emarginatâ, valdè inæquilaterali; valvulis tenuibus; natibus subprominentibus; epidermide tenebroso-olivâ, striatâ, eradiatâ; margaritâ caruleo-albâ et iridescente.

*Hab.*—Dahomey, West Africa. Mr. Fraser, by H. Cuming.

*ANODONTA SENEGALENSIS*.—Testâ lævi, transversâ, subinflatâ, ad latere vel planulatâ vel compressâ, ad basim subemarginatâ, valdè inæquilaterali; valvulis crassiusculis; natibus subprominentibus, ad apices minutè et obliquè undulatis; epidermidè tenebroso-viridescente, nitidâ, eradiatâ; margaritâ vel caruleo-albâ vel salmonis colore tinctâ et iridescente.

*Hab.*—Senegal. J. C. Jay, M. D., E. Verreaux and H. Cuming.

Descriptions of Two New Species of UNIONES, from Georgia.

BY ISAAC LEA.

*UNIO FIBULOIDES*.—Testâ lævi, subrotundâ, inflatâ, subæquilaterali; valvulis crassis, anticè paulisper crassioribus; natibus crassis et valdè prominentibus; epidermide vel fuscâ vel luteo-fuscâ, anticè striatâ; dentibus cardinalibus crassis, compressis crenulatisque; lateralibus curtis, crassis, rectis granulatisque; margaritâ albâ et iridescente.

*Hab.*—Connasauga River, Georgia. Bishop Elliott.

*UNIO COMPACTUS*.—Testâ lævi, triangulari, subinflatâ, ad latere planulatâ, posticè angulatâ, inæquilaterali; valvulis crassis; natibus elevatis; epidermide luteo-olivâ, radiis maculatis capillaris creberrimis; dentibus cardinalibus parvis, erectis, in utroque valvulo duplicibus; lateralibus curtis, crassis rectisque; margaritâ albâ et iridescente.

*Hab.*—Etowah River, Georgia. Bishop Elliott, and Rev. G. White.

Descriptions of seven new species of UNIONES from South Carolina, Florida, Alabama and Texas.

BY ISAAC LEA.

*UNIO CACAO*.—Testâ lævi, oblongâ, subquadratâ, compressâ, ad latere planulatâ, posticè obtusè angulatâ, inæquilaterali; valvulis subcrassis, anticè crassioribus; natibus prominulis; epidermide castaneâ, supernè micante, infernè striatâ; dentibus cardinalibus crassiusculis, striatis, suberectis, in utroque valvulo duplicibus; lateralibus curtis, lamellatis rectisque; margaritâ purpurecente et valdè iridescente.

*Hab.*—Chacktabachie River, West Florida. Major Le Conte.

*UNIO HEPATICUS*.—Testâ lævi, ovato-oblongâ, compressâ, posticè latè biangulatâ, inæquilaterali; valvulis subtenuibus; natibus prominulis; epidermide micante, hepaticâ, vel eradiatâ vel obsoletè radiatâ; dentibus cardinalibus parvis, subelevatis, striatis, in utroque valvulo duplicibus; lateralibus longis, lamellatis subrectisque; margaritâ pupurescente et valdè iridescente.

*Hab.* Salkakatche River, South Carolina. J. Postell.

*UNIO VIRIDIRADIATUS*.—Testâ lævi, latè ellipticâ, compressâ, posticè dilatâ et obtusè angulatâ, anticè regulariter rotundatâ, valdè inæquilaterali; valvulis subtenuibus; natibus prominulis, ad apices minutè et irregulariter undulatis; epidermide subnitidâ, radiis crebris capellaris; dentibus cardinalibus parvis, crenulatis, in utroque valvulo duplicibus; lateralibus longis, lamellatis subrectisque; margaritâ purpureâ et valdè iridescente.

*Hab.* Big Uchee, Alabama, near Columbus, Georgia. G. Hallenbeck.

*UNIO MACRODON*.—Testâ lævi, triangulari, compressâ, subæquilaterali, posticè

[May,

lævi, transversâ, subinflatâ, ad latere com-  
pessâ inæquilaterali; valvulis tenuibus; natibus  
nebroso-olivâ, striatâ, eradiatâ; margaritâ

Mr. Fraser, by H. Cuming.

lævi, transversâ, subinflatâ, ad latere vel  
submarginatâ, valdè inæquilaterali; valvu-  
limentibus, ad apices minutè et obliquè undu-  
latis, nitidâ, eradiatâ; margaritâ vel ceru-  
leâ iridescente.

E. Verreaux and H. Cuming.

Species of UNIONES, from Georgia.

ISAAC LEA.

rotundâ, inflatâ, subæquilaterali; valvulis  
parvis; natibus crassis et valdè prominentibus;  
posticè, anticè striatâ; dentibus cardinalibus  
lateralibus curtis, crassis, rectis granula-  
tis.

Bishop Elliott.

triangulari, subinflatâ, ad latere planulatâ,  
valvulis crassis; natibus elevatis; epidermide  
vires creberrimis; dentibus cardinalibus par-  
ticibus; lateralibus curtis, crassis rectisque;

Bishop Elliott, and Rev. G. White.

Species of UNIONES from South Carolina, Florida,  
Alabama and Texas.

ISAAC LEA.

subquadratâ, compressâ, ad latere planu-  
lilaterali; valvulis subcrassis, anticè cras-  
sioribus; epidermide castaneâ, supernè micante, infernè  
virescens; striatis, subrectis, in utroque  
latere, lamellatis rectisque; margaritâ purpures-  
cente.

Florida. Major Le Conte.

oblongâ, compressâ, posticè latè biangu-  
lulari; valvulis prominentibus; epidermide  
obsoletè radiatâ; dentibus cardinalibus parvis,  
in utroque latere duplicibus; lateralibus longis, lamellatis  
rectis et valdè iridescente.

South Carolina. J. Postell.

latè ellipticâ, compressâ, posticè dilatâ  
et rotundatâ, valdè inæquilaterali; valvulis  
parvis; apices minutè et irregulariter undulatis;  
capellaris; dentibus cardinalibus parvis,  
in utroque latere duplicibus; lateralibus longis, lamellatis subrec-  
tis et iridescente.

Columbus, Georgia. G. Hallenbeck.

angulari, compressâ, subæquilaterali, posticè

[May,

angulatâ; valvulis subcrassis; natibus subelevatis, ad apices minutè undulatis;  
epidermide luteolâ, striatâ; dentibus cardinalibus permagnis, subcompressis,  
elevatis, obliquis crenulatisque; lateralibus longis rectisque; margaritâ argenteâ  
et iridescente.

Hab. Rutersville, Texas. Prof. C. G. Forshey.

UNIO HOUSTONENSIS.—Testâ lævi, subrotundâ, subinflatâ, æquilaterali, ad  
latere paulisper planulatâ; valvulis subcrassis, anticè crassioribus; natibus  
elevatis, ad apices paulisper undulatis; epidermide lævi, virido-luteâ, vel era-  
diatâ vel obsoletè radiatâ; dentibus cardinalibus magnis, erectis, crenulatis;  
lateralibus curtis subrectisque; margaritâ argenteâ et iridescente.

Hab. Houston, Texas. F. Moore, M. D.

UNIO RUTERSVILLENSIS.—Testâ lævi, transversè ellipticâ, subinflatâ, valdè  
inæquilaterali, posticè obtusè angulatâ; valvulis subtenuibus, anticè paulisper  
crassioribus; natibus prominulis, ad apices regulariter et elegantissimè undu-  
latis; epidermide vel fuscâ vel luteo-fuscâ et valdè radiatâ; dentibus cardina-  
libus parvis, compressis, acuminatis, crenulatis, in utroque valvulo duplicibus;  
lateralibus longis, lamellatis subcurvisque; margaritâ ceruleo-albâ et valdè  
iridescente.

Hab. Rutersville, Fayette Co., Texas. Prof. C. G. Forshey.

UNIO FORSHEYI.—Testâ valdè et minutè tuberculatâ, subquadrangulari, com-  
pressâ, subæquilaterali, posticè subbiangulatâ; valvulis subcrassis, anticè cras-  
sioribus; natibus subelevatis, ad apices acuminatis et elegantissimè perundu-  
latis; epidermide virido-luteâ, substriatâ, obsoletè radiatâ, submicante; den-  
tibus cardinalibus subgrandibus, erectis, crenulatis, in utroque valvulo dupli-  
cibus, lateralibus rectis brevibusque; margaritâ argenteâ et paulisper iridescente.

Hab. Fayette Co., Texas. Prof. C. G. Forshey.

Description of a Third Genus of HEMIRHAMPHINÆ.

BY THEO. GILL.

After the transmission to the Academy of Natural Sciences of the paper de-  
scriptive of the genus *Hyporhamphus*, Mr. James C. Brevoort placed in my hands  
a species closely resembling those fishes which have been described as *Hemi-  
ramphus longirostris* and *H. macrorhynchus*. Mr. Brevoort at the same time  
called my attention to the peculiar dentition of the species, there being evidently  
tricuspidate teeth in the lower jaw, while those in the upper were simply con-  
ical. On an examination of the descriptions of the above mentioned species, as  
given in the "Histoire Naturelle des Poissons," it is to be remarked that no al-  
lusion is made to the *shape* of the teeth, but that they are in each described as  
being very fine, immediately after the statement of the size of the upper jaw.  
It is then to be presumed that M. Valenciennes only noticed the conical teeth,  
for one of the characters that he has given of the genus is founded on the  
presence of granular or conical ones. Could Valenciennes have overlooked the  
teeth of the lower jaw, and only examined those of the upper? It appears to  
me possible that he did, for it is scarcely to be believed that a fish so closely  
resembling *Hemirhamphus longirostris* as the present species, could differ from  
it in such important parts. I nevertheless offer this opinion with diffidence.  
As Valenciennes has remarked, the teeth are very small, and as their forms can  
only be discerned through a magnifier, they might have been easily overlooked,  
unless the attention of the observer was particularly attracted to them. The  
peculiarity of the different structure of the teeth in each jaw would scarcely have  
been suspected by the naturalist as occurring in this tribe. If this supposition  
is correct, as to the *Hemirhamphus longirostris* and *H. macrorhynchus*, those  
species should be withdrawn from the genus *Hemirhamphus* and placed in an  
allied one. Valenciennes would probably have himself done this, if he had

1859.]