

Walker  
1911

ny that we could not place at  
 ile can be seen, but we are  
 During every minute of day-  
 ul and interesting to look at,  
 as the days, which are not  
 with the fact that few people  
 e from New York to Manaus  
 Pará and Manaus, in really  
 able that many people would  
 noted German professor, who  
 i vacation.

ve just landed and got settled.  
 week waiting the return of the  
 d manager, but we are assured  
 ra river, as we had hoped, free  
 nses while there. Also we are  
 t Manaus, so the time will not

## SCALA PRETIOSA LINN.

L. SMITH.

## MULTIVARICIFERA.

in the broader shell and greater  
 average shell with the variety,

*Var. multivaricifera.*

- Embryonic whorl,
- Embryonic whorl (?),
- Third whorl, 8 varices,
- Fourth whorl, 8 varices,
- Fifth whorl, 8 varices,
- Sixth whorl, 9 varices,
- Seventh whorl, 11 varices,
- Body whorl, 15 varices.

and upper whorl of the variety

before me there is an impressed longitudinal line which interrupts  
 12 of the varices. When older the animal corrected this irregularity.  
 This line will probably be found absent in other individuals.

It seems remarkable that so striking a shell as this form has here-  
 tofore escaped notice. The habitat of the type, which is in the  
 writer's collection, is supposedly China.

## NOTE ON THE DISTRIBUTION OF MARGARITANA MONODONTA SAY.

BY BRYANT WALKER.

In commenting, recently, on the distribution of this species (Proc.  
 Mal. Soc., IX, pp. 137-139, 1910), I stated that although it had not  
 been cited from the Ohio east of Cincinnati nor from the tributaries  
 of the Tennessee above Knoxville, in the absence of any records of  
 its occurrence west of the Mississippi, south of Iowa, nor in that  
 river below Adams County, Ills., "the inference would be that its  
 original point of dispersal was in the east, and that it had migrated  
 westward by two routes, one down the Ohio and thence into the  
 Mississippi Valley, and the other down the Tennessee from its tribu-  
 taries or head-waters. That it reached its present range by a migra-  
 tion from the southwest is, in view of the known facts of its present  
 distribution, quite improbable."

Since the above was written some additional data of considerable  
 interest have been received.

In the fall of 1910, acting under the instructions of the U. S. Fish  
 Commission, Mr. A. H. Boepple explored the Cumberland River  
 from Pineville, Ky., to Celina, Tenn. In his progress down the  
 river he found *M. monodonta* at the Sloan Shoals near Burnside,  
 between Eads' Landing and Rowena, and at Cloyd's Landing.

I have also recently received the species from three localities in  
 the Clinch River, Tenn., viz., near Needham's Ford and between  
 Kelly and Sharp's Ford, Union County, and between Agee and  
 Offut, Anderson County.

These records definitely determine the occurrence of the species  
 in all of the principal rivers that unite to form the Tennessee, ex-  
 cepting the Powell and the French Broad, and its presence in the  
 Clinch makes it reasonably certain that it will also be found in the  
 former. The head-waters of the latter rise in another, quite differ-

ent region, and it may not be found in it at all, except, perhaps, near its junction with the Holston.

The presence of the species in the Cumberland offers a possible explanation for its occurrence in the Ohio below Cincinnati and in the Wabash. But that, of course, can not be definitely determined until all of the southern tributaries of the Ohio, which head in the mountains of West Virginia, have been carefully explored. If the species should be found in the Big Sandy or the Great Kanawha, for instance, it would seem likely that it reached the Ohio from that source, even though, at the present time, it is not found in that river above Cincinnati.

But, however that may be, these new records tend to confirm the opinion that the original point of dispersal of the species was in the head-waters of the Tennessee system and that its present distribution is "rather the result of an ancient migration from the northeast than one from the southwest."

#### LAND MOLLUSCA AT TOLLAND, COLORADO.

BY T. D. A. COCKERELL.

On August 23 and 24 my wife and I collected snails at Tolland, in Gilpin county, Colorado, at an altitude of 8900 to 9000 feet. The list of species, though short, may be of interest on account of the high altitude, and the addition of one species to the Colorado list.

*Agriolimax campestris montanus* (Ingersoll). Variable, some very dark.

*Vitriina alaskana* Dall. Abundant.

*Euconulus fulvus alaskensis* Pilsbry, abundant.

*Vitrea radiatula electrina* var. *alba* (Jeffreys) Taylor. One.

*Zonitoides arboreus* (Say). Common under *Populus tremuloides*.

*Punctum pygmaeum minutissimum* (Lea). My wife found two by carefully searching over dead leaves from the *Populus tremuloides* zone. I believe only one specimen of this species has previously been found in Colorado. Taylor (Monog. L. & F. W. Moll. Brit Is.) cites Willow Creek and Cloudcroft, but the latter locality is in New Mexico.

*Sphyradium edentulum alticola* (Ingersoll) The adult is over

2½ mm. long, and is *columella* (Von Mart.)

*Vallonia cyclophora*

*Pyramidula croukii*

*Cochlicopa hibernica* (

*Pupilla muscorum* (

*Pupilla blandi* Mors

*Pupilla pygmaea* d shell, 4 mm. long, near swollen as in typical I

*Vertigo modesta parietalis*, but over 2 r shell clear chestnut; apparently a distinct hardly recognizable by certainly included su without much risk of c

NOTE ON EPIPIHRA interesting paper on California (on the western NAUTILUS (Vol. xxv, *E. infumata* Gld. w southern limit of this north of San Francisco eastern side of San Manual of American Mr. Binney also ment its home as far back the extreme form of th highly carinate, heav by Dr. Gould in his the specimens from M

As to the typical *E. Gifford*, it seems clear I might hazard an opi the oyster traffic in wh