

eles of which he analyzes with a master hand. He reaches the conclusion, which I am convinced can never be over-

own, that the original and primitive expressions of the artistic sentiment reveal themselves everywhere in a series of motives which display a surprising and almost complete similarity. This practical identity continues high up in the evolution of art-forms. It is not to be attributed to any historic connection between nations, nor to any prehistoric relations or instruction, but solely to the unity of mind and its expressions through all humanity. "Thousands of ethnographic, religious, symbolic and artistic parallels, with which ethnography and archæology are making us familiar, are easily explained by the organic faculties of the mind of man. This is true for all zones and for all lands of the earth where man has slowly developed from simple to complex artistic conditions." Were these maxims fully understood, we should have fewer attempts to trace Greek and Assyrian back to Egyptian, or Central American back to Asiatic art, than has of late been the case.

#### Native Fairs in Alaska.

The early conveyance of articles of Asiatic manufacture far into America is matter of surprise for no one who is acquainted with the commercial and migratory habits of the natives of the Northwest Coast. As slaves are part of their stock in trade, Asian blood and features were introduced without a general or even partial migration of Siberic tribes across Behring Straits, for which, *du reste*, there is no evidence at all.

The times and places of these fairs were recently stated by Mr. I. Horner from information supplied by Lieut. Miles C. Gorgas, U.S.N., in an address to the Numismatic and Antiquarian Society of Philadelphia, as follows: Beginning at the south, a fair is held in June at Port Clarence, just south of the narrowest part of the Straits. It is numerously attended by the Chukchis of Siberia, the natives of St. Lawrence Island, south of the Straits, and by others from Cape Prince of Wales on the American mainland. The second fair is held at Wotham Inlet on the north shore of Kotzebue Sound. It lasts through July and August, and is attended by about 1,500 people, some Siberians, but mostly natives, especially from Point Hope, these being the principal traders of the coast. A third fair is at Point Lay, and a fourth at Camden Bay, not far from the mouth of the Mackenzie River.

The trading boats make a regular round of these fairs, carrying articles in demand from one to the other; so that some from the far interior of Asia will in a few years be transported along the shores of the Arctic Sea, and southerly indefinitely into the centre of the continent. This has doubtless been going on for centuries, and would explain the presence even of Japanese and Chinese articles in ancient burial places — if such were ever found.

#### NOTES ON LOCAL JASSIDÆ.

AN interesting feature in the study of entomology is the fact that there are still a great many untrodden paths and plenty of work for the discovery of new species. In the Hemiptera there are still many forms unknown to science. In my collection of two or three seasons Professor Edward P. Van Duzee has found several new species; but only those belonging to the *Jassidæ* will be noticed here.

In his admirable paper on the genus *Phlepsius*, recently published by the American Entomological Society of Phila-

delphia, he enumerates several new species, and groups others under that genus, which to many have been known under other names; for instance, what we have known as *Bythoscopus strobi* Fitch is now to be known as *Phlepsius strobi* Fitch. This decision was rendered by Professor Van Duzee in 1890, and published in *Psyche*.

Our old and well-known species *Jassus irroratus* Say is now to be known as *Phlepsius irroratus* Say; it was at one time known as *Allygus irroratus* Uhler; and Burmeister, Walker, and Uhler knew it as *Jassus testudinarius* Burm.

The genus *Phlepsius* as now arranged by Professor Van Duzee is a step in the right direction, and his "synoptical table" of the species will be a great help to Hemipterists in studying this order of insects; it bespeaks a future for it and a basis for study equal to that projected by our able fellow-townsmen, Professor Ezra T. Cresson, in the Hymenoptera.

The species in the *Jassidæ* taken by me in the locality of New York City number eighteen or more, some of which have as yet not been determined.

*Phlepsius strobi* is, according to our record, quite a rare species. Professor Van Duzee records but five specimens. Mr. Uhler's lot only contained one male from Fitch, and two specimens from Texas, one specimen from D. S. Kellcott, Ohio, and one female from myself. We notice by this the wide distribution of the species, yet but five specimens are recorded in Professor Van Duzee's paper.

It would be interesting and valuable to hear from the Entomological Society of Philadelphia, as well as from Professor Riley for the Government, in regard to this insect; also from Professor Osborn, who would know it, but, if he had had it in his collection, he would probably have sent it to Professor Van Duzee, to assist him in making up the valuable revision of this genus.

*Phlepsius fuscipennis* Van Duzee is a new species found by Professor Uhler and myself, and described from one pair sent him by Professor Uhler and fourteen males and two females sent by myself. Here, again, we have sufficient distribution to warrant the recording of more specimens; and we would like to hear from any source as to their habitat in other States; and this could be soon found out, were those species not known to collectors, and now in their collections, sent to Professor Van Duzee, for identification. With us they seem to be fairly abundant, and are exceedingly interesting, both on account of their rarity and markings.

Professor Van Duzee states, "that the dark colored species may be distinguished by their broad form, short impressed vertex, and strongly wrinkled pronotum; the brown elytra of the males, spotted with white; some of the males exhibit the pale arcs on the front, and the ocelli may be black."

*Phlepsius fulvidorsum* Fitch has been taken by myself, but in limited numbers. It seems to have quite a wide distribution; but as yet Professor Van Duzee records as known to him but ten (10) specimens, and these from New York, Iowa, Maryland, and Texas. This must be a difficult species to determine, for, as good an Hemipterist as Professor Van Duzee is, he finds great difficulty in distinguishing between two predominant forms, which can only be well done by the study of a large series of specimens from an extended area; and if all who are interested in this order would send specimens to him and assist him, he would no doubt soon solve the problem and explain it to us so we could also know wherein the difficulty lay.

Another new species, described by Professor Van Duzee

and taken by myself, is *Phlepsius humidus* Van Duzee. Though not uncommon, this species is recorded but once outside of New York State, by two or three examples labeled Delta R.R. I have taken it quite frequently, and Professor Van Duzee says "it is not uncommon about Buffalo, in low, swampy meadows and other humid situations." He has also taken it near Lake Ontario, and states that this is the "large variety mentioned in his list of Hemiptera from that locality, published in the *Canadian Entomologist*, for 1889, under the name *Allygus irroratus* Say."

*Jassus excultus* Uhler is now to be known as *Phlepsius excultus* Uhler. This species is well recorded from New York, through Texas, to New Mexico. As yet I have not collected this species, nor does Professor J. B. Smith, in his "Catalogue of the Insects of New Jersey," record it from that State. A thorough search will no doubt reveal its whereabouts in this locality also.

Among the Jassidæ collected by me in this locality, and determined by Professor Van Duzee, is *Cicadula 6-notata*. It is very common and easily taken with a sweep-net.

*Jassus subfaciatus* Say is also common, and Professor Smith records *Jassus clittellarius* Say, and *Jassus irroratus*, now known as *Phlepsius irroratus* Say. *Athysanus* (grypotes) is represented in my collection by four species, taken here, *tergatus* Fitch, and *unicolor* Fitch, and two new species named by Professor Van Duzee as *Athysanus galbanatus* Van Duzee and *Athysanus viridius* Van Duzee. None of the species are very abundant; and they are represented in my collection by from three to six specimens, although the former two species are much more abundant than the latter. Professor Smith gives *A. fenestratus* Fitch, *minor* Fitch, *nigrinasi* Fitch, *variabilis* Fitch, *striatulus* Fallen, and *unicolor* Fitch, as *Jassus unicolor* Fitch. No doubt all these species are found here, and as far as Fitch's types are concerned, we believe, belong to this State.

In Deltoccephalus I have collected *inimicus* Say, and *Sayii* Fitch, both being quite rare as far as my collecting goes. Professor Smith has *inimicus* Say recorded as *Jassus inimicus* Say. *Scaphaideus* is represented by two species, one of them new to science, and the other *Scaphaideus immistus* Say.

*Athysanus* is represented by *Curtisii* of Fitch, which is not uncommon with me.

In the sub-family TYPHLOCIBINÆ, we have *Typhlocyba rosæ* Fitch, and other species not yet determined, one species being very common on *Ptelea trifoliata*, L, and of a delicate green color. One of the undetermined species may be *trycineta* of Fitch, and recorded by Professor Smith as occurring in New Jersey.

*Erythroneura vitis* Harris is common with us; but I have not as yet found *comes* Say, or *vulnerata* Fitch, both found and recorded from New Jersey, and the latter from New York State also.

In the genus *Empoa*, Professor Smith records *guerci* Fitch, *fabæ* Harris, and *rosæ* Harris, the latter now known as *Typhlocyba rosæ* Fitch, as before noticed.

Professor Smith also records *Cælidea olitoria* Say, and *C. subbifasciata* Say. I have not as yet collected any of this genus, although, in the present unsettled state of the arrangement in several of the orders, it is quite impossible to state just what one has, until such an arrangement as Professor Van Duzee has given us with the genus *Phlepsius* is worked out for all the families.

It is to be hoped that hemipterists and all entomologists will assist specialists by sending them specimens; and more

accurate data should be given, with the material, than, I must confess, I have been able to give in the past, so the distribution and numbers may be determined.

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#### LETTERS TO THE EDITOR.

\* \* \* Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.

On request in advance, one hundred copies of the number containing his communication will be furnished free to any correspondent.

The editor will be glad to publish any queries consonant with the character of the journal.

#### Readjustments of the Loup Rivers: Examples of Abstraction Due to Unequal Declivities.

REGRETTING that my article on the "Evolution of the Loup Rivers" has been misunderstood, partly on account of an error in drawing the map, I present herewith a corrected map (Fig. 1), showing the true location of the old channel connecting the head of Wood River with the South Loup at Callaway, also some additional features not shown on the first map.

In responding to the call of Professor Davis for "examples of the lateral abstraction of one stream by another on a slope of planation," I must premise that planation is wholly distinct from abstraction. The efficient factor in the former process is lateral corrosion, in the latter headwater erosion. Planation shifts one stream bodily over to another, whereupon both unite in that channel, below the point of contact, which is the lower of the two. In the process of abstraction the capturing stream does not itself shift over to the captured stream, but extends one of its tributaries across the original divide by headwater erosion.

Omitting, therefore, the phrase "on a slope of planation" from the question as propounded by Professor Davis, I will say that the phenomena in the Loup valley are such as to raise a strong presumption at least that some abstractions have occurred. As he remarks, "the slopes are in the proper direction for such abstraction." Moreover, the old empty channels are there as silent witnesses of adjustments already accomplished, and the ravines of greater slope and more vigorous erosion, leading into that stream which lies at a lower level to the north-east, have already captured much more than half of the space between streams, thus threatening further abstractions in the future.

In addition to the one at the head of Wood River I would cite as another example of abandoned channels the depression leading up to the Dismal River in the line of Mud Creek, the approximate position of which is roughly indicated by dotted lines, marked "Old Channel" on the map. Mud Creek is a weak stream in a great valley, itself as eloquent a witness of change as the dry valley above. It must have carried a large volume of water, and have been a worthy mate to the Middle Loup, before it was beheaded by the Dismal, a vigorous tributary of its neighbor on the north-east — the winning side in all these re-adjustments.

To show the actual position of existing divides, as indicating further abstractions, I have traced the water-shed by dotted lines for some distance between the North and Middle Loups, and between Cedar Creek and the North Loup and Calamus River. On the latter line the distances are 13½ miles from the divide to Cedar Creek, and 4½ miles to the Calamus. The eastward stream has already captured three-fourths of the territory. On the former line, at the south-east end, the divide is 12 miles from the North Loup and 6½ miles from the Middle Loup. Here two-thirds of the divide yields allegiance to the eastward stream. At the north-west end of the same line it will be observed that the water-shed is nearer to the North Loup than the Middle Loup. This is because the North Loup is a re-adjusted stream above the mouth of the Calamus. If we measure from the latter, which is the true original head of the North Loup, the divide assumes its normal position nearer to the higher stream lying to the south-west. The larger and longer stream, called the North Loup on account of its size, is really an overgrown tributary, which owes its superior vigor to the fact that it now flows more nearly in the line of maximum gradient than does the Calamus, or the unadjusted North Loup