and feed with them; I get them at two cents per pound; I have five barrels now just received. If feeding well will make them grow they shall have it. It is funny to see the little fellows eating small crumbs; sometimes a dozen will be around one small crumb and stick to it until it is all gone. I delight in sitting at my pond watching the fish, and they seem to know me and my wife from strangers, judging from their actions. I will make another drawing of my pond and send you if you did not get the one sent. Nothing will please me better than to meet you and talk fish. I have exterminated the bull-frog and snake tribe, and all is quiet on the lake at night now, and not a ripple is made by his snakeship seeking the tempting frog or fish.

ABEL A. WRIGHT.

## MOVEMENTS OF YOUNG ALEWIVES (?) (POMOLOBUS SP.) IN COLO-RADO RIVER, TEXAS.

## By TARLETON H. BEAN.

The United States National Museum has recently received from Mr. J. H. Selkirk, of Matagorda, Texas, two small alewives, measuring about one inch in length, which are wonderfully like the fry of the common alewives of the Potomac and other northern rivers. They have been compared directly with fry of nearly the same size taken opposite Washington, and, while we cannot say positively that they are identical with the "branch" alewife or herring, yet we believe that they are the same species. Mr. Selkirk sent the fish to Professor Baird, thinking that they might prove to be shad, which, indeed, they resemble. I quote from his letter to the Commissioner the details of his observations upon them :

"MATAGORDA, TEX., April 20, 1881.

"To the FISH COMMISSIONER,

"Washington, D. C.:

"DEAR SIR: I inclose two small fish. Please inform me what species they are. My reason for asking is, that some few years ago there were some shad placed in the Colorado River at Austin, and, as I have never seen any shad, and these were taken out of the same river near its mouth, I thought it possible they were shad. They were all going up stream, and in innumerable quantities. I am not exaggerating when I say, I walked along the bank for a mile, and as far as I went they were in sight as thick as anywhere, and still coming, the school being about two feet wide.

"This river empties into Matagorda Bay a short distance from where I saw them."

From the fact that these young herring were discovered near the mouth of the river ascending the stream in dense masses, one would infer that they were the young of some anadromous species, such as the "branch"

or "glut" alewife of the Potomac, rather than of the golden shad of the Mississippi Valley, which is essentially a fresh-water species. We are not obliged to depend upon this observation of habits, however, since a comparison of the fry with the young alewives previously mentioned leaves little doubt as to their identity. It is probable that they were hatched in the waters of the Gulf of Mexico adjacent to the Colorado mouth some time in February or March of this year. It is to be hoped that specimens of the adult alewives, and any other herring-like fishes that may be found in the Colorado and other tributaries of the Gulf, will be secured and forwarded to Prof. S. F. Baird, United States Commissioner of Fish and Fisheries, Washington, D. C., in order that the progress of introduction may become known. If those fry observed by Mr. Selkirk are young alewives, it is almost certain that they were introduced into Texas with the shad. It is well known that the newlyhatched alewife is small enough to come in through the gauze bottom of a hatching-box, which will not allow the escape of shad eggs or fry. The alewife, moreover, is hatched earlier than the shad, and is always on hand in advance to unite destinies with its larger relative, even to the extent of being carried thousands of miles and deposited in waters never seen by its progenitors. In this way, it seems to me, one of the great lakes, and some of the lakes of New York, were stocked with alewives in the effort to introduce shad; at all events, they first appeared in those waters after the attempts with shad were made.

U. S. NATIONAL MUSEUM,

Washington, May 6, 1881.