

Mr. L. R. Brown, of the "Q" offices, is a frequent visitor to the club grounds; Mr. H. A. Sloan, of South Water street, is prized by many men outside the Mak-saw-bas; Mr. G. W. Randle, one of the heaviest game handlers in this market, is also one of the ardent; Chas. P. McAvoy, of the McAvoy Brewing Co., and J. J. Gore, of the big firm of Chapin & Gore, ought to pretty nearly be able to liquidate matters, and Fire-Marshal D. J. Swenie certainly can if they can't; John Watson comes pretty nearly being a household word, and so does Charlie Kern; Chas. Wilcox, T. Benton Leiter, J. W. C. Haskell, W. L. Shepard, T. W. Wilmarth—all these are names you hear about both in the city and around the clubs. It is useless to begin singling out names, for there would be about seventy-five singles. It is better to take a pot-shot at the flock, as below:

Officers—President, R. B. Organ; Vice-President, W. P. Mussey; Secretary, C. S. Petrie; Treasurer, J. A. Kinney. Board of Managers: R. B. Organ, W. P. Mussey, T. Benton Leiter, W. H. Haskell, C. S. Petrie.

List of Members—W. A. Barton, A. J. Baxter, Dixon Bean, Matt Benner, L. R. Brown, H. C. Buechner, C. Bentham, W. J. Campbell, G. S. Chapin, H. P. Crane, C. A. Crane, F. F. Croxton, Joseph P. Card, A. E. Dyer, W. C. Dyer, C. Ben. Dicks, E. E. Flint, W. H. Gleason, E. H. Goodrich, J. J. Gore, W. H. Haskell, H. C. Hoyt, J. W. C. Haskell, Charles Husche, Fred Henrotin, J. T. Hasting, H. P. Isham, J. A. Kinney, S. S. Kimball, Chas. Kern, C. C. Lamos, W. H. Leckie, T. Benton Leiter, Jos. Leiter, W. H. Lees, John Matter, Chas. P. McAvoy, Chas. H. Mears, H. J. Milligan, G. F. Morcum, Wm. P. Mussey, T. H. Miller, Geo. G. Newberry, J. Milton Oliver, R. B. Organ, Chas. S. Petrie, Michael Petrie, J. W. Parmlee, F. W. Pond, C. E. Rollins, G. W. Rumble, G. W. Randle, J. A. Sharp, H. A. Sloan, P. E. Stanley, L. P. Satter, Jacob Sutter, Jesse Sherwood, D. J. Swenie, J. C. Stone, W. L. Shepard, W. R. Smith, F. P. Taylor, J. E. Tilt, J. Thompson, John Watson, John F. Whiting, John B. Wiggins, T. W. Wilmarth, J. W. Woodward, Chas. S. Wilcox, L. K. Waldron, J. H. Wall, Everett Wilson, F. S. Waters.

The membership is always full and applicants are always waiting for a vacancy. There is a good deal of comment in that.

The Mak-saw-ba Club has put down a great many quail annually on their grounds. It is an understood rule of the club that a member shall put down two quail for every one he kills. If it were not for marauding natives, it would be easy to make many bags of 38 as one shooter did this fall. This club surely emulates the man who makes two blades of grass grow where but one grew before.

CHICAGO, Ill., Feb. 4.—The reports of shooters lately in from the South will serve to give some light on the question, where do the ducks go? Mr. Jesse Cummings, who was one of the Chicago party who went to Galveston after canvasbacks, says they found a brackish lake near the Gulf about fifty miles from Galveston, known as Stevenson's Lake, where the canvasbacks swarmed in thousands. Other bays and creeks along the coast, clear on down to the Mexican coast, were fairly alive with mallards and other ducks, and their numbers surpassed anything he had dreamed. The birds, however, showed more than their Northern cunning, they being hunted all the way along their flight. Market hunters were among them even there, and one Chicago commission man was sending two or three barrels of canvasbacks to Chicago every day, packed on ice. The shipping required daily trips of a sailing vessel to Galveston.

In sleepy old Mexico, however, there seems to be found a section where the ducks are not harassed so continually, and where they are found in wonderful abundance. Mr. Wilfrid N. Lowe, president of the Illinois State Sportsmen's Association, is just back from a trip which extended as far south as the City of Mexico. He says that along the Casa Grande River the railway train passed within forty yards of great banks of ducks and geese, who did not stir, or at most only lazily flopped away to alight a little further on. At the lakes known as Las Palomas, Mr. Lowe and his friends had all the jack snipe and duck shooting they wanted, and they found the birds astonishingly fat. The laguna country near Chihuahua is also a tremendously stocked wildfowl country; indeed, great portions of interior Mexico swarm with waterfowl, contrary to popular belief.

Gen. Pacheco invited Mr. Lowe and his friends to visit his ranch in Mexico, west of the railway, and assured him that every man of the party should kill a deer every day, and see bear and other big furred game as often as they liked. Mr. Lowe had a most enjoyable trip, and like everybody else who visits that wonderful old country, he returns infatuated with it.

Mr. F. P. Taylor says that he saw more quail in the Indian Territory than he thought there were in the world. Other game also is abundant. The numbers of greyhounds kept by ranchmen is increasing. The Burt. Barnett outfit has a pack of over twenty. The Indians are all in earnest hopes that the Springer bill will never be passed by both houses of Congress. They know it would be the worst thing for them that ever happened.

The Fox River Association is still growing. The officers wish it generally published that they desire communications from other clubs and sportsmen's associations relative to this work in hand, and that they wish all such organizations to join in one great organization, so that all opposition may be at once crushed and overcome. The Rock River Association is a good one and a strong one, and in practically the same work. Do the Rock River men know the size and importance of the Fox River Association? Would it not be well for the two to join forces and membership? There promises to be a good membership from the Sandwich Club.

The following papers descriptive of the shooting clubs of Chicago, with illustrations, have been printed in the FOREST AND STREAM:

Fox Lake District, Dec. 27.
Mineola Club, Jan. 10.
Fox Lake Shooting and Fishing Club, Jan. 24.
Odd Corners About Fox Lake, Jan. 31.
Fox River Association, Jan. 31.
Waltonian Club, Jan. 31 and Feb. 7.
Tolleston Club, Feb. 7.

Others are in preparation. Next week will be given the English Lake Club.

It is again impressed upon me that FOREST AND STREAM goes even unto the uttermost ends of the earth. Since beginning the duck club articles which have lately been running in the paper I have had all sorts of letters drop in on me, though not any sort I was not glad to get, for such letters from unknown friends are among the most prized treasures of any writer's collection. I have tried to answer some questions about Western duck shooting methods in work already published or to follow, and to private letters have replied as best I could. A few weeks ago a gentleman from Chelmsford, England, wrote in regard to work he was preparing for the London Field, to-day I got a letter from a manufacturer of artificial flies in county Tyrone, Ireland, wanting to know if Chicago duck clubs could supply him with certain varieties of duck plumage that he needed. Can they? Why, of course they can. Chicago can do anything. All this only satisfies me even more that people read even the very poorest part of this journal; and I believe if I wanted the earth I should advertise for it in FOREST AND STREAM with a pretty good show of getting what I was after.

Mention was made some weeks ago of a big ducking trip undertaken by some Chicago shooters. The party was finally made up, I believe, of Messrs. W. B. Chatfield, Jesse N. Cummings and R. W. Cox, who were accompanied by John Taylor, the keeper of English Lake Club House, and Tim and Frank Wood, keepers of the Swan Lake Club. The party have returned after an absence of about a month. They went to Galveston Bay, Texas, and they actually got among the canvasbacks and had big shooting.

Mr. Fred Taylor has been back from his Indian Territory trip for some weeks. I have been unable to find him, and should be afraid to approach him, anyhow, on account of the largeness of the time he must have had, I want him to talk to somebody else a good while first, because they say he is not always safe when loaded with a turkey story. E. HOUGH.

175 MONROE STREET.

NEW YORK SOCIETY FOR THE PROTECTION OF GAME.—At the meeting of this society last Monday night a check for \$2,000 was turned over to Secretary T. N. Cuthbert, to be used for the prosecution of game dealers who have been selling quail and grouse out of season. Fish Commissioner Eugene G. Blackford and Mr. E. P. Rogers were elected members.

FRED A. ALLEN of Monmouth, Ill., sends us a price list of his excellent duck and goose callers. He is doing a big business in calls, and his success is a new instance of the truth that it pays to advertise a good thing.

FOREST AND STREAM, Box 2,832, N. Y. city, has descriptive illustrated circulars of W. B. Leffingwell's book, "Wild Fowl shooting," which will be mailed free on request. The book is pronounced by "Nanik," "Glean," "Dick Swivel," "Sybillene," and other competent authorities to be the best treatise on the subject extant.

Sea and River Fishing.

"Sam Lovel's Camps." By R. E. Robinson. Now ready.

THE HAGFISH.

MOST of you doubtless have looked upon the hagfish, or slime eel, as a curiosity chiefly on account of its blind, lipless, and parasitic existence; its dentition adapted to burrowing into the flesh of its prey; its large eggs provided with a horny case and polar threads for adhesion, and its wonderful capacity for giving off slime. We learn something still more singular, however, from the writings of Wilhelm Müller, J. T. Cunningham, and Fridtjof Nansen concerning the life history of *Myxine*, namely that it nearly always combines two sexes in one individual. As the studies of Nansen, the curator of Bergen Museum, Norway, and recent explorer of the interior of Greenland, are the latest and most satisfactory on this interesting subject, we cannot do better than quote from his paper in the annual report of his museum, Bergen, 1888:

"On opening large specimens of *Myxine* we generally find well developed ova in their sexual organs. If we, however, take smaller specimens, of about 28 to 32 centimeters in length, and examine their sexual organs, we generally find that the anterior portion is but slightly prominent, and contains very small and young ova, while the posterior portion is often very broad and prominent, is lobate, and has a distinct whitish color along its margin, and has, in all respects, the appearance that we would expect to find in a testis; and this it really is. If we take a piece of the margin of this portion of the generative organ, tease it, and examine it in the fresh state under the microscope, we generally find abundance of spermatozoa in various stages of development. There can thus be no doubt that that portion of the generative organ is a real male organ. * * * Those young specimens of 28 to 30 centimeters in length are consequently hermaphrodites, with quite immature ovaries, but well developed testes, and they must be able to perform male functions. If we now examine somewhat more minutely the generative organ of the large specimens, which generally contains a number of large and well developed ova, we find that those ova occur only in the anterior portion of the generative organ and that the mesarium of this portion is very broad and prominent, while the membrane corresponding to the mesarium of the posterior portion of the generative organ is very narrow and carries no reproductive elements, neither ova nor spermatozoa.

"If we examine specimens of *Myxine* of sizes between that of these large females and that of the hermaphrodite previously mentioned, we will often find specimens in which the anterior portion of the generative organ is rather prominent and contains oblong young ova, while the posterior portion is of testicular nature and not very prominent. These specimens seem consequently just to be in a transitory stage between male and female state. Indeed, on examining a sufficient number of specimens, we will easily be able to find every transition stage from hermaphrodite males to fully developed females, and the rule seems to be that, the larger the specimen is, the

more are the female organs developed, and the more do the male organs disappear.

"From what has been stated above we seem already entitled to conclude that *Myxine* is generally, or always (?) in its young state a male; while at a more advanced age it becomes transformed into a female. Indeed, I have not yet found a single female that did not show traces of the early male stage.

"*Myxine glutinosa* is a protandric hermaphrodite. Up to a body length of about 32 or 33 centimeters it is a male, after that time it produces ova. The proportion between the posterior male portion of the reproductive organ and the anterior female portion is not constant; the male portion is generally about one-third of the whole length of the organ. The few true males of *Myxine* observed are probably transformed hermaphrodites. The young testicular follicles, or capsules, have a structure quite similar to that of the young ovarian follicles. * * * Nearly ripe spermatozoa may be found in specimens of *Myxine* at every season of the year. *Myxine* deposits its ova at every season of the year."

Deposited eggs of the hagfish are excessively rare. The few specimens existing in museums have been obtained by dredging, but the actual places of deposit remain to be discovered. Perhaps we must seek them in deeper water than that in which the fish itself is habitually taken. A slime eel of a related genus was trawled by the Albatross in upward of 400 fathoms off the coast of California, containing many mature eggs.

We are indebted to Mr. Thomas Lee, one of the naturalists aboard the Fish Commission steamer Albatross during her voyage to the Pacific, for the following interesting communication about the southern hagfish, or slime eel, *Myxine australis*:

"While running through the Straits of Magellan in February, 1888, I was much surprised by the slime-producing powers of the hagfish. We took these fish at a number of anchorages; but at Boija Bay the supply seemed inexhaustible. At night we were skinning and skeletonizing a number of gulls and cormorants, and put all the refuse from the laboratory tables into our fish baskets. This bait proved most attractive, and the baskets came up with large quantities of hags and entirely covered with a mass of slime. I then tried holding a hag with stout forceps, to see how much more of this slime it could produce. The fish tied itself into a ball about the point of the forceps and almost immediately covered itself with slime. Repeatedly removing the slime I think I collected a pint before the supply seemed to slacken, and even then it seemed a hopeless job to get the fish free from it. I could not discover how it was produced, and can only testify to the fact of its very rapid production and in great quantities."

Couch describes a slime eel (*Myxine glutinosa*) that was placed in a receptacle holding three or four cubic feet of water and filled it so entirely with slime that the whole mass could be lifted out with a stick in a single sheet. The lateral line at the sides of the belly contains 108 large glands, or mucous sacs, each with an open pore on the upper surface, from which the slime is poured out. Capt. J. W. Collins states that he has seen trawls which were in the water three hours come up with cod and haddock weighing from ten to fifteen pounds, having their intestines wholly eaten out by slime eels. Sometimes when the trawls have been down from one to three days certain fish will have all their flesh eaten under the skin; this applies to fish hooked in the gills that die very soon after hooking.

The pug nose eel (*Simenchelys parasitica*) burrows into the flesh of halibut and sometimes eats its way along the whole length of the vertebrae.

Lampreys attach themselves to anything they can reach, but they are found in mid depths or at the surface and not on the bottom. Capt. Collins knows of one that came up on a patent log that was towing at the rate of eight or ten knots an hour.

A species of *Ophichthys* has been taken out of cod, but was probably swallowed and, perforating the abdominal wall in its effort to escape, became encysted and hardened in the flesh, just as frequently happens in the case of the lant (*Ammodytes americanus*). The latter even gets into the liver of its captor occasionally, but, strangely enough, does not interfere with the health of the swallower.

THE TROUT OF STERLING LAKE.

Editor Forest and Stream:

I have just perused the article in your last issue on the trout in Sterling Lake. For many years in the past I was very familiar with that beautiful sheet of water and spent a number of summers camped on its shores, when its surroundings were wild and primitive, and almost unknown to the outer world. It was a grand pond, with waters as clear as crystal, cold and of great depth. During the summer of 1865 I put in most of the season there and made a special effort to capture some of the salmon trout, which an old friend long resident in that section had many years before assured me were denizens of its waters. I tried deep trolling and every method I could think of, but with a single exception without success. One morning when I had about given up, I found a trout of 2lbs. weight on a line which had been set in water 150ft. deep. In many respects it resembled the fish described in the article just read. It bore little resemblance to a brook trout—head and tail as noted in your article and a few small black and red spots on its sides. The flesh was of a deep salmon color. I learned from old Hiram Garrison, who was in the employ of the Sterling Iron Co. and had charge of the outlet of the lake, that some years before he had picked up a dead fish of the same kind in the outlet, which he found to weigh 13lbs. He also informed me that he had several times observed pairs of these fish lying off the rocks, on the edge of very deep water.

Garrison had lived there for many years, and although not a sportsman, had made the lake a special study. He knew of but one man who succeeded in capturing these fish and he visited the lake alone during November, and permitted no one to witness his methods.

But there are other trout in the lake, which differ from brook trout, although not so greatly as the fish I caught in 1865.

Several friends, during the winter of 1878-79, went with me to Munroe, Orange county, to relieve the care and worry of city toil, by having a tramp with guns and dogs through the woods. Birds being scarce one day I