The Mysterious Tenant of a Tree.—Within the limits of the city of New York is a great swamp dense and treacherous the year round. It lies in a tract of country lately set aside by the city and called Van Cortlandt Park. One afternoon in the early spring of 1887, I was poking about among the trees and bushes on the outskirts of this swamp watching a wary hawk and some restless noisy crows that were perhaps beginning to build their nests in the tops of the swamp oaks. Several old crows' nests were found; also one composed of large sticks high among the upper limbs of a swamp oak. I carefully scrutinized the latter through my field glass, and I saw that it was not a new one, yet it was occupied, and the occupant's feathers or fur seemed to wave in the light breeze. I threw sticks at it, but could not see signs of life. A bird would surely have left. Then I pounded the trunk of the tree, thrashed about the tops of saplings and beat the bushes, but still there was no movement. Then I cut a stout stick, a yard long, and determined to climb the tree and find out its tenant. The tree was one of a bunch of four or five that sprung from a common base, and the group was surrounded by water. Small limbs had grown pretty thickly from butt to top, so that climbing could not be difficult. The platform of sticks, evidently a deserted crows' nest, was supported close to the main stem by several limbs and many others grew above and around it. My first impulse was to strike the bunch of red fur with my stick, but the limbs prevented that. All the while it had not stirred. If I could only make it move, perhaps I could deal an effective blow at it. So, reaching out at arm's length, I gave a strong poke into the mass of fur. It instantly arose upon its forelegs, stared a moment in bewildment and surprise, and the very next instant, with a wild leap, went tumbling over the side of the nest into a pool of water fully 40ft. below. Then, slowly dragging its tail, it crawled away, wet and forlorn, into a dense growth of brambles out of sight. The mysterious creature was a red fox. Not 40yds. from this very tree was a railroad track upon which many trains a day had been passing. The home had not been hard for him to reach on account of the numerous limbs which served as rounds to his ladder. Here, he had, doubtless, slept day after day in the midst of civilization, with a feeling of such security that he would not deign to move until a stick was thrust rudely against his ribs. It is commonly believed that foxes resort only to burrows in the ground or holes among rocks. But this individual, with danger on so many sides, was, no doubt, driven by some great necessity to attempt the almost incredible feat of sleeping in a tree-top.—*E. T. Adney in Independent.*

Kentucky.—Spencer Co., Ky., Jan. 12.—The shooting season just past has been a very good one. Quail have abounded, and a pheasant has been picked up in the eastern portion of the county, in the hills of Beech and Crooked Creeks, where there is still vast, almost unbroken, forest. Hares have been plentiful, but the sport is so little appreciated that only market hunters have enjoyed it. There is not a beagle in the county. If their merits were known it would be but a short time before hare-hunting would be the most popular of sports. There can be few amusements more interesting than that of having the little trailers drive the hares out of cover where a good shot could pick them off *ad libitum*. The big fish-pond and game-preserve scheme has not materialized. Senator Gilbert has gone hunting a State office, and no one seems now to be pushing the enterprise. I am certain the plan was practicable, and would pay stockholders big interest on their money.—J. S. M.

Forest and Stream Powder Tests.—New York, Jan. 19.—*Editor Forest and Stream:* In reply to the letter of Messrs. Von Lengerke & Detmold in last week's issue, and also to the complaint of the manager of the American Wood Powder Co., that my Colt gun, which was used in the powder tests at Claremont under your management, was a large 12-gauge, I beg to state that the gun was tested by Mr. J. Dannefelser, No. 9 Chambers street, and myself, and it was found a very small 12-bore. A No. 12 wad required considerable pressure to go from chamber to choke. I hope this will satisfy those interested in that test as being fair to all concerned, as I did the shooting with my gun on that day without any interest other than a record for my gun.—Edwin A. Summers.

Snow and Rifle Sights.—*Editor Forest and Stream:* A couple of items, one by "Hunter" and the other by Mr. Lyman, remind me that I have also been troubled when hunting deer in the timber, when the snow adheres to the branches and underbrush, by having the sights of my rifle, both front, open and the Lyman, choked with falling snow, or the view of the front sight obstructed by snow lodging on the barrel, especially so if the snow be damp. I overcome the difficulty by reversing the usual method of carrying the gun; that is to say, by carrying it bottom side upward.—H. L.

A Sight Attachment.—Let "Ahmeek" (issue Jan. 8) take a small rubber ball, such as is used by children as a plaything, cut it in half, or allow two-thirds in one position. In the part used make a small hole to tightly fit over projection in sight. Place in position, and the larger portion being toward face will serve to obviate the trouble complained of. The mode of application, etc., will suggest itself applicable to all peep sights.

At Hagen, in Prussian Westphalia, the attention of an official was aroused by the barking of a dog on the railway. Thinking there was something amiss the man followed the animal, and found that its master, a sportsman, while walking homeward on a low railway embankment, had been seized with a giddiness and had fallen in a state of insensibility on to the metals. Guided by the dog the man soon reached the spot where its master lay and succeeded in removing him. A few minutes later a train passed.—*London Daily News.*

Sea and River Fishing.

The full texts of the game fish laws of all the States, Territories and British Provinces are given in the *Book of the Game Laws.*

THE SUNAPEE TROUT.

Salvelinus alpinus aureolus.

For some time past ichthyologists and anglers alike have been deeply interested in the question of the name and origin of the splendid trout of Sunapee Lake. Is it a distinct and peculiar species which has always been with us, or is it simply the European charr or saibling which has been lately brought over from Europe? Two of our highest ichthyological authorities have expressed themselves with some positiveness in regard to this matter. Dr. Tarleton H. Bean, of the U. S. Fish Commission, has described the fish in question as a distinct species, under the name of *Salvelinus aureolus*, while Mr. Samuel Garman, of the Museum of Comparative Zoology, has declared it to be fully identical with the European *Salvelinus alpinus*, the charr, saibling, sälbling or *ombre chevalier* of the rivers and lakes of northern Europe. On the supposition of the identity of the Sunapee trout with the European form, its occurrence in the lakes of Maine has been attributed to a recent plant of saibling eggs brought from Germany by the U. S. Fish Commission. The possibility that this trout is a hybrid between the saibling and the European trout or "brown trout" (*Salmo fario*), has been also suggested.

The study of the species of charr is a very difficult one. The specific differences are slight and the individual variations surprisingly great. The presence of a large amount of material is necessary in order to reach any conclusion. Those conclusions which now seem to me probable I wish to present in the most modest manner possible, for they are liable to be wholly overturned when the waters between Maine and Greenland are more fully explored.

For the purposes of the present study, Dr. Bean has very kindly lent me a considerable amount of material, from the National Museum, by consent of Dr. Goode. This consists of the following specimens:

Salvelinus alpinus—10,249, from Europe; 17,456 (two specimens), Bergen; 39,924, Sterling Lake, N. J. (introduced).

Salvelinus aureolus—From Sunapee Lake, 37,408, 37,409, 37,410, 39,334, 39,335, 39,900.

Salvelinus—A hybrid of *Salvelinus alpinus*, male, with *Salmo fario*, female, 2 years old, received from Norway, 17,451.

Salvelinus (nitidus)—34,384, Disco, Greenland.

Salvelinus (arcturus)—36,097, mouth of St. Lawrence River; 37,670, lake near Quebec.

Besides these specimens I have received several specimens of *Salvelinus aureolus* from Sunapee Lake and Dan Hole Pond through the kindness of Mr. A. N. Cheney and others. From Dr. Bean I have also specimens of *S. oquassa* from Rangeley Lake, and of *S. fontinalis agassizii* from Monadnock Lake. There is, however, no present question of the distinctness of the Sunapee trout from either *fontinalis* or *oquassa*, though its relations to the latter are very close.

From the material in hand the following conclusions seem justifiable, and I am pleased to find that these results agree in the main with the observations both of Dr. Bean and of Mr. Garman.

1. In comparing the specimens of *aureolus* with those of *alpinus* I find a very close agreement in all external respects, some of the specimens in hand coinciding, as Mr. Garman has noticed, in almost every detail with one of Dr. F. A. Smitt's colored figures of *alpinus* from Sweden. I find, however, the following distinctions constant in these specimens, these differences being substantially those already pointed out by Dr. Bean.

In *aureolus* the gill rakers, 6+11 or 6+12 in number, are quite short, less than one-third diameter of eye, and angularly bent outward, the oldest specimens having them shortest in proportion and most curved.

In *alpinus* the gill rakers are 7+15 or 7+14 in number, longer and straighter than in *aureolus*, two-fifths length of eye in specimens of the same length as those of *aureolus* measured. In form of gill rakers and in all other respects the specimen from Sterling Lake introduced (from Germany) agrees fully with the Norwegian saiblings.

In *aureolus* the pectorals are shorter (1⅞ in head) and the dorsal lower than in *alpinus*. In the latter the pectoral is 1⅛ to 1¼ in head.

Other apparent differences, which may depend wholly or in part on the condition of the specimens are these: The hyoid (hypobranchial) teeth in *aureolus* are smaller and in a broader series than in *alpinus*, the stomach a little thicker and the pyloric cœca smaller. I doubt the constancy of these characters. The specimens of *aureolus* are also a little more robust in form, a character of trifling value among trout.

Dr. Day has recently maintained, and he has shown good cause for his opinion, that the six or eight nominal species of charr ascribed to the waters of Great Britain are all forms of one—*Salvelinus alpinus*. Recent continental writers seem to share this view, long ago advanced by Agassiz, who placed all the charrs of Europe, including Iceland, in a single species, *alpinus*. Dr. Day has shown that the species is subject to great variation in the development of the pectorals. None of the European writers have paid much attention to the gill rakers. Dr. Günther has counted in English specimens 9 and 11 gill rakers on the lower limb. If these counts are correct, the number would vary from 6+9 to 9+15. But this count may be questioned, as it is not unlikely that some of the smaller ones have been omitted in Dr. Günther's enumeration. When all these facts are taken into consideration, the only character left to distinguish the Sunapee charr from the saibling is the curved form and perhaps lesser number of its gill rakers.

This problem is complicated by the existence of other saibling-like charrs in lakes of Canada and Greenland. It is evident, too, that some of these are even more like the saibling than the Sunapee trout is, a fact which Dr. Bean has already pointed out in a letter to me.

The specimen above mentioned from Disco, Greenland, is a fine trout, 15in. long, wholly silvery in color, a fact which shows that it was taken in the sea. This specimen has the gill rakers slender and straightish, 9+15 in number, the longest 2½ in eye. In this respect it agrees perfectly with the saibling, but in the form of the body and the shortish fins (the pectoral 1⅞ in head) it more resembles the Sunapee trout. This Greenland fish represents the species called *Salvelinus nitidus* (Richardson). This has been thought to be simply the female of a long-finned Greenland trout called *Salvelinus stagnalis* (Fabricius). Perhaps *nitidus* is the female and *stagnalis* the male, or perhaps *stagnalis* is based on river and *nitidus* on sea-run specimens. Apparently the two are not distinct species and I do not see how either can be separated from *alpinus*. Apparently, also, *nitidus* only differs from *aureolus* in having the gill rakers of the *alpinus*. An unpublished engraving of another Greenland trout (*nitidus*) agrees perfectly in form and color with *aureolus*, but the gill rakers are not shown.

In view of all these facts, I have no hesitation in regarding these Greenland charrs as forms of the saibling. That the saibling should extend its range across to Greenland need not surprise us. It is found in all the mountain lakes of Europe from Austria to Spitzbergen. It enters the northern seas and swarms in the ponds of Iceland. In late autumn, in the North Pacific, black-spotted trout (*Salmo mykiss*) and the Dolly Varden charr (*Salvelinus malma*) freely enter the ocean, and they inhabit alike both sides of Behring's Sea. The saibling could as easily reach Greenland from Iceland as to cross to Iceland from the Scottish coasts.

Two other specimens before us are also of interest in this connection. One of these, a young trout, 10⅜in. in length, with parr marks and without red spots, is from a lake near Quebec. The other, 9⅜in. long, was taken in the Gulf of St. Lawrence. This specimen is very dark in color, almost like a blueback. It has no red spots and its scales have the silvery lustre which is acquired on entering the sea.

These two specimens seem to agree with each other in essentials. They have straightish gill rakers like the saibling, but their number of these appendages (7+12 and 7+14) is intermediate between the saibling and the Sunapee trout. The pectoral fins are also intermediate in length, 1⅜ in head in one specimen, 1⅝ in the other. The opercular bones seem more straight than in any other specimens examined, but this appearance may be due to the fact of the partial drying of the skin over the bones before the fish was put into alcohol. These specimens are apparently intermediate between the saibling and the Sunapee trout, and again intermediate between the Greenland *nitidus* and the Sunapee fish. The specimen from Quebec agrees in all respects, waiving non-essentials, with Dr. Günther's figure of *Salvelinus arcturus*, the "northernmost Salmonoid known," from the northern limit of British America. Dr. Bean has suggested to me that this specimen may be the unrecognized *Salvelinus rossi* of Richardson. This view may be correct, but Richardson's description is so vague that we can only be sure that his fish was some one of the *alpinus* set, with red spots and a red belly, perhaps a *nitidus* or *stagnalis*.

The Sunapee charr is certainly not a hybrid between the saibling and any other species, European or American. The hybrid *alpinus fario*, examined by me, has the scales adherent as in *alpinus*, but almost as large (135 series) as in *Salmo fario*. Its gill rakers, 6+11 or 12, are stiffish and nearly straight; there are a few teeth on the shaft of the vomer (*fario* has many, the species of *Salvelinus* none at all) and the color is very eccentric. The body is dark and is clouded all over with sharply defined yellowish reticulations, which extend on the head and fins. Its coloration somewhat resembles that of a pike. It has neither the red spots of *alpinus* nor the black spots of *fario*.

In this connection we may briefly notice the other nominal species of charr described from British America and Greenland. *Salvelinus arcturus* seems to be a form or variety of *S. alpinus* as already noticed. The same is true of *Salvelinus nitidus* and of *Salvelinus stagnalis*. *Salvelinus alipes* is the same as *stagnalis* and *rossi* probably identical with *nitidus*, as is also *Salvelinus hearnii*. *Salvelinus hoodi* was based on a mixed lot of *Salvelinus fontinalis* and *S. namaycush*. *Salvelinus hudsonicus, canadensis* and *immaculatus* are *fontinalis*, the latter name given to sea-run specimens. But for all we know the *alpinus* may run out to sea as well and become *immaculatus* too. *Salvelinus naresi*, from the Arctic regions, seems to be the same as *oquassa*.

If these views be correct we have in America five species of charr, each highly variable and running into many local varieties.

1. Salvelinus namaycush.—The Great Lake trout, from Maine to Wisconsin, and Idaho, northwestward to Alaska.

2. Salvelinus malma.—The Dolly Varden trout, from the Sacramento Basin to Siberia, west of the Cascade Mountains.

3. Salvelinus alpinus.—The charr or saibling or *ombre chevalier* of Europe, from Maine to Boothia and across to Greenland, Iceland and all Europe; a well marked variety being the Sunapee charr (*Salvelinus alpinus aureolus*). Other varieties of doubtful standing are *alipes, nitidus* and *arcturus*.

4. Salvelinus oquassa.—The blueback, Rangeley Lakes to Boothia.

5. Salvelinus fontinalis—The brook trout or speckled trout, from the Saskatchawan country to Labrador, and south in the mountains to Georgia; its range more southerly than that of the others and not crossing the Rocky Mountains.

As for the Sunapee charr itself we may say that it seems to be distinguished from all the other forms of charr by its gill rakers. It is probably not a distinct species, and it is probably native to the waters in which it is now found, and not an importation from Europe. Should it appear, however, that the saibling in that part of Germany from which specimens have been brought to America have gill rakers like those of the Sunapee trout, this opinion would be reconsidered. Other lakes of Maine, Quebec, Labrador and Boothia must be explored before these questions can be definitely settled.

It is interesting to notice that just as the right of the saibling to be regarded as a native American has been questioned in this country, so has its citizenship in England been also denied.

Dr. Day tells us that in olden times the people were "taught that three sons of the church introduced these fishes into Wales from Rome, and placed two in each of the lakes of Llanberries, Llynumber and Trevennyn."

Perhaps we are justified in supposing that by the same persons and at the same time two were placed in Sunapee Lake, two in Dan Hole Pond, and two in the sea at Disco. DAVID STARR JORDAN.

THE UNIVERSITY OF INDIANA, Bloomington, Ind., Jan. 7.

FOX RIVER FISH AND GAME ASSOC'N.

CHICAGO, Ill., Jan. 15.—As many readers of FOREST AND STREAM know, the large and small lakes of what is known as the Fox Lake system, lie about fifty miles to the north of Chicago. The Fox River drains these lakes for the most part, and also supplies them with fish. The Fox River runs into the Illinois River, and the Illinois again into the Mississippi. These lakes, if left unsupplied with other than their natural increase of fish, would in time probably become quite exhausted. The keeping open of the great waterway from the Mississippi up to the lakes is therefore a great desideratum for the Chicago anglers, and for those anglers who live yet closer to these waters. To stock the lakes and streams, and to prevent illegal and wasteful methods of taking the fish from them, is a question of equal or greater importance. Briefly, to do these very things is the mission of the Fox River Fish and Game Association. Time and again attention has been called to this organization in these columns. It is the one and only protective society in the State of Illinois which amounts to a row of blue beans in actual protection of fish or game. It deserves credit. It works. It performs. It does something besides talk. Singular, unique, peculiar, almost startling it is in this regard. What it has done by way of opening up the dams on the Fox, of breaking up netting on the Illinois, and otherwise helping the Fox River chain of waters, has already been recounted duly in this journal.

The Fox River Association held its third annual meeting Thursday, Jan. 14, at 3 P. M., at the Sherman House of this city. There was a good attendance. The association is not composed of a union of clubs, but of a union of individuals. Its success is the success largely of private effort, though it is growing constantly by accessions from sportsman's clubs lower down the rivers. As might be expected, therefore, the proceedings were marked by their informal simplicity and directness. The Fox River Association has no style about it to speak of, no pomp, pride and circumstance of glorious war, but as a certain esteemed friend would say, it is "with 'em at every station of the road." The brevity and businesslike character of this meeting was delicious. The auditing of accounts was short, the reading of the minutes of the last meeting was short, and the address of President Cole was short, likewise to the point. Mr. Cole said:

To the Members of the Fox River Fish and Game Association:

GENTLEMEN—I can think of no better introduction of our annual report than by quoting from the fly leaf of our book of by-laws: "The objects of this Association are to help to the enforcement of fish and game laws, to press for the enactment of new statutes for the preservation of fish and game, and to see that proper fishways are put in all the dams in Fox River."

During the first two years our efforts were directed mainly to the first and second objects mentioned above; of the success of said objects you were informed a year ago.

The situation that confronted your directors at their first meeting of the past year was a depleted treasury, and an apparent indifference or neglect on the part of the members generally that was very discouraging to say the least. How that difficulty was overcome you will learn from the treasurer's report.

Not to bore you too much with details we have to report that all the dams in Fox River are provided with efficient fishways, built according to plans and specifications furnished by the Fish Commissioners, except one small dam at South Elgin, where there is an unused canal or sluiceway that has been fitted up experimentally with the understanding that if it does not work satisfactorily a regular fishway will be substituted.

On March 21 last we employed F. L. Buck, of Elgin, and obtained for him an appointment as warden. He covered all the ground from Fox Lake to the mouth of Fox River at Ottawa, and as a result of his work we can report seventeen convictions for the violation of the fish laws and seven convictions for the violation of game laws. He also distributed copies of the laws, posted notices, etc., etc., and warned persons all along the line. And best of all he seized and destroyed thirty-four nets which he found set in different parts of the river. Mr. Buck resigned Nov. 1 to accept another position, after a summer's work that accomplished more for the advancement of fish and game protection than we could have anticipated at the beginning of the season.

We have been told repeatedly by the Secretary of our State Fish Commission, Dr. Bartlett, that our work on the Fox River has been of great help to him all over the State, in that it has aroused a sentiment for the cause that is resulting in the formation of clubs that are giving their attention more and more to this matter of protection.

Before closing we wish once more to revert to the matter of finance. We can do very little without funds. If all persons interested in our organization would make even a slight effort this fund could easily be obtained. Our annual dues are but $1 and a life membership costs but $10. All that is necessary is to send the cash with name and address to the treasurer, as all are eligible and there is no initiation fee. If each member of the Association will make it his special effort to procure one or more members, the comparative small amount of cash needed will soon be forthcoming. Respectfully submitted for the board of directors. GEO. E. COLE, President.

The report of the meeting of the Board of Directors was then made, briefly detailing the committees and the work they had done. Mr. John Wilkinson, minister of the exchequer, then made his report, in many ways the most important of any. Mr. Wilkinson showed the budget to be as follows:

CREDITS.	
Cash on hand, beginning of year	$158 35
Annual dues	57 00
Life memberships	250 00
Contributions	229 70
Total	695 05
EXPENDITURES.	
Prosecuting cases	25 00
Paid warden F. L. Buck	476 57
Printing and postage	54 95
Examining dams	38 67
Hauling fish for planting	8 00
Total	603 19
Balance on hand	91 86

The report offers quite a good showing. The "contributions" named among the sources of income contain among them the following: James W. Nye, $5; White & Wills, sporting goods dealers, $5; James H. Fisk, sporting goods dealer, $5; H. N. May, $5; A. G. Spalding & Bros., sporting goods dealers, $25; Hibbard, Spencer, Bartlett & Co., $25; the Jenney & Graham Gun Co., sporting goods dealers, $25; the John Wilkinson Co., sporting goods dealers, $25; E. J. Lehman, $25; the Fox Lake Fishing Club, $101 (which shows the prominence of this club in the work); C. F. Hills, $10; through C. F. Hills and Geo. E. Cole, $30; Geo. E. Cole $24.70, and others. In return for above, memberships in the association were issued to the extent of $95, but the total available cash from this source amounted to $229.70. Thus it may be seen that in some instances at least, both firms and individuals have given cash as help in a worthy project to help preserve fish and game.

The Fox River Association, however, does not claim to do much in the way of protecting game. The less it does the better. It is doing some work on fish. It ought to stick to this, especially in its own younger and weaker days. All conservative business thought shows the folly of branching out into many lines of business. One business well pushed is better. In a beautifully worded resolution the Illinois State Sportsmen's Association resolved to "conjoin" with the Fox River Association, in courtesy to its committee present. The "conjoin" business ceased when the meeting of the Illinois State Sportsmen's Association adjourned, just as everybody knew it would cease. The State association is an admirable body in its own way and for its own purposes, but it does not genuinely and honestly class game protection among those purposes. Since it does not and cannot claim such purposes, what has the Fox River Association to gain by acting with it, since its own purposes are those of protection and nothing else? The union would be only one of courtesy, and not one of practical and mutual interest. Let the Fox River Association saddle itself with no complicating responsibilities, but run free in its own field of practical results. Beyond its own feeling of courtesy in the matter, none will see the force of this quicker than the State Sportsmen's Association. Indeed, it would be better if the Fox River Fish and Game Association should strike the word "game" quite out of its name as well as out of its purposes. Let others pay for wardens to watch for illegal ducks, and let this association attend to the fish. The sense of this is apparent. The only wish behind it is to see this association go on and not go back, and present at least one decent chance to a newspaper wanting to chronicle an occasional bit of success in practical protection.

Directly bearing on all this was the report of the committee on game, Messrs. Baird, Burket and Hamburger. Mention was made some time ago of the cases brought by Messrs. Baird and Bartree against the South Water street men, Henry Sloan and J. B. Brousseau, for selling illegal game. In his report Mr. Baird told how he and his assistant didn't do anything in these cases. He scored the fat-witted Brusewitz, the Chicago warden, roundly, as did others also.

Mr. Hills, reporting for the committee on fish, tersely announced "There was pretty good fishing last season in the Fox Lake country."

The committee on legal and political action had little to report. Mr. Hertz spoke at some length upon the advisability of having a bill introduced prohibiting the abominable practice of fishing through the ice. Mr. Hertz told of one Elgin party who in three days caught 2,800lbs. of fish in Pistakee Lake last December. The extent of the outrages was not generally known, but if known the Legislature might pass a prohibitory law. Mention was however called to the fact that previous efforts in this direction had been unavailing.

Messrs. Prussing, Burkett and Glenn, appointed committee on election of the board of directors, retired to confer, and in their absence the president called upon State Commissioner Bartlett. Dr. Bartlett was received with enthusiasm. He stated that the Fox River Association was the first organization that ever gave him any help in his work, and its help had been notable. He complimented the association highly. Dr. Bartlett had found that usually the men who complained the most about game violations were the most ready to object when he came to enforcing the law in their neighborhood. There had, however, been some work done, and thanks to this conjoint work we could now look upon a waterway open to fish from the Mississippi up to the lakes, no dam in the whole distance being now an obstacle to the fish. On the Illinois River nothing could ever be done till the last year. In that time over 500 nets had been destroyed and seventy convictions secured. It was deplorable that the Legislature had given an appropriation of only $2,000. The fish wardens had to depend solely on fines for revenue. One warden, failing to make his case in justice court, had been arrested himself and nearly thrown into jail. Proceedings in justice courts had been found useless, and the Commissioner had adopted the plan of seizing the nets and letting the other fellow do the suing, which brought the cases into the Circuit Courts. Thanks to the aid of the president of the association, the Commission had been enabled to buy a little steamer of its own, and it now patrolled the Illinois River very thoroughly. In the work of propagation, 40 carloads of matured fish had been distributed, besides fry. Dr. Bartlett deplored the putting in power of such idiots as the Chicago warden, Brusewitz, but had no doubt that a petition to Gov. Fifer would lead to his prompt dismissal. The system of district fish wardens was working very well, the Quincy warden doing especially well. Replying to a question from Mr. Hills in regard to the cutting off and netting of fish that had run out in high water into the Illinois River sloughs, Dr. Bartlett replied that this was formerly practiced largely. The Commission had taken up one net so employed whose wings were 1,200ft. long. Another net was 1,000ft. long. "You must get hold of the net," said he, "and confiscate that, by 'holding it for storage' pending suit. He had seen four acres covered as a drying ground by the hoop-nets of one firm. Market-fishing is carried on in the Illinois to a terrible extent." Dr. Bartlett also favored a law against ice fishing.

Dr. N. Rowe, president of the Illinois State Sportsmen's Association, was called on, and contrasted the history of game protection with that of fish protection. The way of the game protector he had found a thorny one. He would favor a bill to put the matter of game protection in the hands of the Fish Commissioner. He favored a condensation and concentration in the work. Instead of many bills and measures we should unite, both associations standing on some plain and simple measures.

Mr. Cole pointed out the obviously unwise and impractical features of an effort suggesting any such double work for the Fish Commission under that or any other name. Coöperation might do, but amalgamation would be highly unwise, and would defeat the purposes of both fish and game protection. The suggestion met with no favor.

The FOREST AND STREAM representative detailed the extent of the ice fishing in Lake Maria, Lake Catharine and Channel Lake as witnessed on a recent trip and mentioned the outrageous fish pens of Lake Senachwine, on the Illinois River, where masses of diseased and half dead fish are crowded together for weeks at a time and ladled out for shipment as the market dictates. It was suggested that the association make members of the summer resort men along the upper lakes and then induce them to stop their ice fishing.

The committee on election reported and recommended the following to constitute the board of directors for the ensuing year: From Pistaqua Lake region, Coroner Henry L. Hertz and Clarence A. Knight; from the Northwestern Pleasure Club, John Stephens; from Fox Lake Fishing Club, Chas. F. Hills and Geo. E. Cole; from Crabapple Island region, John Wilkinson; from Mineola Club, L. M. Hamburger; from the East Shore region, Geo. R. Davis and O. J. Weidner; from the North Shore region, Jas. Gardner.

The board of directors will early meet and elect the officers of the association for the ensuing year.

E. HOUGH.

FISH AND GAME IN WEST VIRGINIA.

Editor Forest and Stream:

Hunting this season was pretty good here. Some of my friends who joined me were very successful. The greatest drawback on those from a distance was the mild weather; when they killed a deer or two they had to cut short their hunt to save the game. Turkey were unusually plentiful. I attribute it to the favorable winter of '89-'90. We had some bear this fall, but none of my party had the luck to bring down any. I have had the good fortune to kill three nice bears since you were with us; one weighed 226lbs. My eleven-year-old boy killed a very large wildcat near my deer park during the month of December. My brother John also came across a wildcat killing a small deer this last hunting season. We have some good trout streams, or at least they are considered so by all the anglers who have tried them. Mr. A. F. Rees and Mr. Ripley Hitchcock, of New York city, have tested our streams to their satisfaction. One is known as Wate's Run. The largest fish are never longer that 15 or 16in. A stream called Trout Run, about three miles west of me, is noted for its good trout fishing. I don't know what the best specimens taken out weighed, but a friend and myself on one occasion took out of a pond, or hole as we call it, 23 nice trout in one day, the largest 16½in. long. There are two more trout streams only a few miles from my place. One is styled Stony Creek and the other is known as Pond Run; both are beautiful, cold and clear streams. Capon River, four miles distant, is a splendid black bass stream; it contains a vast number of fine bass, the largest weighing 5¼ to 6lbs. I hope it will be our luck to have you visit us another hunting season. Should you have any friend who wishes to catch trout send him here and I will give him good attention. I have built a new and comfortable dwelling since you were with us, and am better prepared to entertain my friends.

T. B. WILSON.

CAPON IRON WORKS, West Va.

[The home of the Wilson brothers, in Hardie county, has long been noted as a hunting locality, and we can testify, from personal experience, to the hospitality of the people and the abundance of deer, turkeys and pheasants. Capon Iron Works is best reached by the B. & O. Railroad to Woodstock and thence 12 miles by horse over easy mountain trails. The cost of boarding is merely nominal. Deer are driven to guns posted on their runways.]

A CARP'S DINNER.

MIRABILE DICTU! Strange things happen in far-off places. It is not uncommon in opening fish to find various and divers sundries within their maws. On Lake Superior the great lake trout, the *namaycush* of the Ojibbewas, seem to always be ready and willing to accept any of such things as are thrown from the cook's galley of the steamers and sailing vessels which plow its pellucid waters. It is not uncommon to find a fork or spoon, beef bones, potatoes, broken wine glasses, corn cobs, and even a bunch of keys are among the treasure trove from their omnivorous collection bags. But now a carp comes to the front as a container of the neatest outfit of anything yet seen on the great unsalted sea. On Christmas morning Capt. McCormick, an old salt and fish man, saw two fine large German carp on sale in Duluth. Struck with their appearance, and thinking to please his friend, the Doctor, he purchased one and sent it to him with the compliments of the season. Of course the Doctor was pleased with the gift and ordered it tabled. You can imagine the astonishment of all when it was opened to find within a silk-lined case containing a large meerschaum pipe and cigar holder, all in good order, too. It was a genuine carp, imported from Germany, of the variety called *papier mâché*. The Doctor has it yet carefully preserved, and the smoker's apparatus, too, which he shows to his friends with very great pleasure.

R. O. SWEENEY, SR.

DULUTH, Minn.

SUSQUEHANNA RIVER FISHING.

Editor Forest and Stream:

In September, 1888, the Messrs. Hanlon, Prof. Siler, of Harrisburg, and Mr. C. H. Sangrey, of Washington Borough, in eight hours' fishing caught 93 "salmon," or pike perch, and 10 bass. One of the salmon weighed 8¼lbs., another 6lbs., and a number ranged from 3 to 5lbs. The largest of the bass tipped the beam at 4¼lbs.

In September, 1889, near Creswell Station, Messrs. John Yeley and W. B. Charles took from a small area of water (not more than 300x40ft.), 68 "salmon" in a few hours, the largest weighing 5lbs., and the entire catch averaging ¾lbs.

During the season of 1889, a royal specimen of the Susquehanna "salmon" was taken with rod and line near Mud Island, by Mr. John Keech. This fine fish was one of the largest of its species ever taken from the river, in this locality, and weighed 11lbs. 2oz.

In July, 1889, Messrs. Sangrey and Brush caught, in two and a half hours, 32 "salmon," the largest ranging from 3 to 5lbs. in weight.

June 15, 1890, Mr. Harvey Brush took in about three hours fishing, 16 bass, one individual weighing 3lbs.

In the month of July, 1890, after being out one day for about eight hours, Messrs. W. B. Charles and John Myskin caught 20 "salmon," the largest 2lbs. in weight.

STEHMAN.

STATE NORMAL SCHOOL, MILLERSVILLE, Pa., Jan. 13.