

went (my thanks to him for the same), and in it he remarked that bass would take the fly at the edge of weeds, no matter how deep the water. That gave me some good sport last summer. He also remarked on the cat-like way they often follow and take the fly. I had noticed this myself and it set me to thinking, and that to trying and the trying gave success. Try this: When you see bass following your fly and darting from side to side as you often can in clear water, draw it slowly at first, then let it sink a moment and then give it a quick jerk, and just at this point the bass have a great way of taking it, whereas, if you draw it slowly and regularly in, they would simply follow without taking. You have often done the same thing with a kitten and a string. Now, these two ideas were worth a good deal to me; these are the kind anglers ought to "swop" and discuss. Of course, in different waters bass rise best to different flies just as trout do, but with trout we have a number of standard flies, with which we would attack any water with confidence. Have we such with bass, and if so, what are they? The capabilities of the bass for the fly have not yet been developed. I do not think any one would say we knew it all. As I have said before, the bait department has got the start. Take, for instance, the only book devoted exclusively to this fish, and tell me which is the most prominent.

Every man has one cast, to which he is apt to turn more than to another. His favorite, in short. On our Eastern lakes this is, with me, a grizzly king stretcher and red ibis dropper. The first takes the big ones, the latter the medium weights. For a night fly the yellow May has been more successful with me than the white miller. The biggest strike I ever had and the only time I ever saw a small-mouth bass break water violently like a trout was on this fly. We parted connections, alas, however, he taking my fly with him as a curiosity. For fear lest some of the big vs. small jump on me I will state that there are no big mouths in that lake. Yes, this is the point in which the small-mouth is decidedly inferior, to the fly-fisher, in comparison with other fish to which he is a peer, if not a superior.

Now the summer is over and our sport is nearly done. The time will soon be at hand when we get our angling by mending and making tackle and by exchanging experiences and discussing them. In bass fly-fishing we are all novices, and differ only in degree. We must be, seeing how young the art is. Therefore we would all like to learn, and to do so we must exchange ideas, and we would like to hear, all of us, from those in high places, having authority, what they have learned since last they wrote. At any rate, we won't learn by going to sleep and letting the frog-slingers get the best of us.

PERCYVAL.

NEW HAVEN, Conn., Oct. 17.

**ON WINDHAM TROUT STREAMS.**

I WAS in a small town in Windham county, Connecticut. A friend and myself decided to try if we could not find a few trout in some of the many clear streams. They tried to discourage us by telling us that although the brooks were just the thing for trout and that in former years they had caught a great many out of them, it was no use to try now as the fish were not there. This, however, had no effect on us, as we were both fond of the woods and were only too glad of an opportunity of spending a day in them. We decided first to fish the Mashamoquet, which flows into the Quinnebogus.

We began fishing just below a dam, on which there is a carriage repairing shop and a grist mill, neither of which were running this afternoon, so it was perfectly quiet. We began with flies, but not having a rise after half an hour's fishing we tried worms, and with the first cast landed two nice trout. We tried for quite a while longer in this pool, but not having any more success started down stream, wading down the middle and casting into every pool as we went. When the afternoon's fishing was over, having waded several miles, the only fish we had in our creels were the two we had landed below the dam. Being by this time pretty hungry we started for home.

The next day we struck into a stream just above a meadow which is flooded in winter and where the people cut ice. The stream flows through the center of this meadow for about a mile and a half, and then goes into the woods, getting shallower and wider. There being no pools, there is said to be no fish, but we fished the meadow through and the result was thirty-seven fair-sized trout.

The following day I tried a small brook, my friend taking the same route he had followed the day before. My stream joined the one he was fishing just above the meadow to its rise at a spring about a mile up. Coming down this stream I got thirty-eight fish, making, with the twenty-nine he got, a pretty good catch of fish for a place where "there aint no trout." On our way home we met an old man who, after seeing the luck we had had, advised us to try the stream known as the Lyon brook, saying it had been one of the best streams around here when he was young.

The next day we started, going west on what was known in stage-coach days as the Providence and Hartford turnpike. Striking into the woods and following a wood path, we came to the remains of a sawmill, which had long since fallen into disuse because of its distance from the railroad. This was the brook we were to fish. After going for quite a while down stream along the bank lined with large pines, under which the brush seemed to have died, making the walking very comfortable, we congratulated ourselves that we were to have a very pleasant tramp after all, although we had not yet taken any fish, though we had seen a good many going over the shallows. But we were soon to find out our mistake, for the whole appearance of the woods changed, the pines were replaced by oaks and chestnuts, and the clear spaces between the trees were changed for thick underbrush. We had now to keep on the edge of the bank or in the stream, both being very undesirable, because the few pools there were lay in the middle of the stream, and consequently we were in full view of the fish. Hoping for a change we kept on in the stream, going in above our waists in some of the muddy places. I always wear cheap canvas shoes instead of rubber boots. The change came soon, but it was for the worse. Trunks of trees and great rocks began to obstruct our path in the stream, the drift of many spring freshets and winter storms, and these were interwoven with tough creepers.

We now debated whether we had not better turn and retrace our steps, but decided to keep on because having been on the stream for three hours we must at least have gone two miles, and must be near the end of our tramp. So keeping on for another hour, climbing over one trunk, under the next, and cutting our way through creepers, we came unexpectedly on a wood road that crossed the stream. Here we sat down to eat what little lunch we had with us. When half through

our lunch we were delighted to see a man coming down the road. He seemed surprised to see us and said that people very rarely came down the stream owing to the hard traveling, and then only when they had to. He advised us to keep on, as the traveling was not so bad below there, and where we expected to come out was not more than a mile distant. The only fish he had seen taken lately had been shot as they went over the shallow places; and a great many had been killed in this way. After half an hour of the same kind of walking we heard the sound of the mill in the distance, and knew that our walk was nearly over. We soon came to the mill, and that finished our fishing. It was three miles home, making, with the three miles going, and the four hours on the stream, one of the hardest tramps I ever took, and we had not a fish to show for it.

NEW YORK, Oct. 12.

**THE "KINGFISHERS."**—Menominee, Mich.—*Editor Forest and Stream:* The charge that the "Kingfishers" had broken our game law I know to be false and without the slightest foundation. Having been a resident of the Lower Peninsula of Michigan for nineteen years, and spending a month or two every fall in the northern part hunting, I have come to know of the "Kingfishers" in the years gone by, and know them all to be true and ardent sportsmen, men whom no one can truthfully say ever infringed the laws of the State. Let any one go over the ground where they have camped and hunted and fished since the first of their camp-fires was kindled in old Michigan, and I defy any one to find a single person that has aught against them. I deeply regret that any one should accuse the "Kingfishers," and I thank you for your refutation of the slander.—S. E. B.

**A BIG CAYUGA LAKE BASS.**—Seneca Falls, N. Y., Oct. 13.—The largest small-mouthed black bass ever recorded in this section was captured yesterday off East Varick, in Cayuga Lake, near here, by Mr. Thomas Blodgett, of this place. The old "Triton" weighed 64 pounds after being out of water ten hours. It was taken with a fly on an 8-ounce rod and fought for a full half hour before being landed. Mr. Blodgett took ten other bass at the same time, the total weight of the catch being 32 pounds. Tom is conceded to be the champion fly-caster of Seneca county, but the above average beats any of his former scores. Bass fishing on Cayuga Lake has been unusually good throughout the present season, owing doubtless to the fact that many nets have been confiscated and destroyed.—L. G. S.

**THREE TO EACH ROD.**—In connection with some good fishing, the following occurred at Big Island Pond, one of the Seven Ponds, Maine, Sept. 16, 1885. Mr. E. E. Allen, Boston, Mass., and C. C. Maxson, of Westery, R. I., while fishing from the same boat, struck and played at the same time six trout, three to each rod. Five of them were safely netted and weighed in the aggregate three pounds and fourteen ounces. As to a choice of fly for these waters, it was noted that of fourteen fish taken one morning twelve were upon the "Parnachene Belle" used as an upper dropper. Did its location have anything to do with the preference shown? This preference was marked at all times, but not always so strongly as upon the occasion mentioned.—M. N.

**NEW MEXICO TROUT FISHING.**—Mr. F. B. Thurber, of this city, contributes to the *American Grocer* a pleasantly written account of a trout fishing excursion to the Ruidosa, a mountain stream twenty-five mile from Fort Stanton. His companions were Colonel Meisner and Lieutenant Scott, of Fort Stanton. The party had a delightful time and caught a capital string of fish. They fished with the fly, but we regret to observe that Mr. Thurber speaks of his rod as a "pole."

**A NIPPISING MASKINONGE.**—A maskinonge has been taken in Lake Nipissing, near North Bay, which measured 49 inches in length with a girth of 21 inches, and weighed 39 pounds. Nine revolver bullets were put into the monster before it was landed. It is to be sent to the Fishery Exhibit in London, Eng.—A. K. T. (Ottawa, Ont., Oct. 14).

**SHOOTING TROUT WITH A SHOTGUN** is one of the forms in which New England barbarism manifests itself. And yet they complain of the scarcity of fish.

*Fishculture.*

Address all communications to the Forest and Stream Publishing Co.

**SUCCESS OF SALMON IN THE HUDSON.**

AS our readers are aware, Prof. S. F. Baird, U. S. Fish Commissioner, has been stocking the Hudson with salmon fry for the past two years. The fish have been hatched at Cold Spring Harbor, N. Y., by Fred Mather, and distributed by him in the small streams of Warren, Essex and Hamilton counties which flow into the Hudson. Among other streams stocked was Clendon Brook, Glens Falls, and our correspondent, Mr. A. N. Cheney, has at times reported their appearance there in private letters and was asked for specimens. Last Monday he sent six or eight fish, of six to eight inches, and the following letter to Mr. Blackford, State Commissioner:

GLENS FALLS, Oct. 9.—*Mr. E. G. Blackford*—Dear Sir: As requested in your letter of July 2, I send you to-day by National Express specimens of the young salmon from Clendon Brook. I was absent when your letter came and have been home very little since, which is the cause of the delay. I told Mr. Mather that I would certainly get them before winter. I engaged a man to take the fish, but he was not successful, owing to high water. Yesterday I went to the brook with a friend, Mr. W. D. Cleveland, of Houston, Tex., and in a short time caught the number I send. You will, perhaps, remember that Mr. Mather sent me 40,000 salmon fry on May 21, 1884, and 60,000 salmon fry and 150 yearlings April 29, 1885, from Cold Spring Harbor, and all were deposited in Clendon Brook, a tributary of the Hudson. The Clendon was once a famous trout stream, yielding trout of 4 pounds and upward, and still there are some few baskets of small fish taken from it. Yesterday the stream seemed fairly alive with salmon for a mile, and residents tell me that this is the case its entire length. As the trout were attending to their domestic duties up stream the brook was given over to the salmon. They were in the deep holes and at the foot of the reefs, but everywhere in numbers. There seemed to be two distinct sizes, one four to six inches long, the other two to three inches long. With the exception of a few chubs, silver chubs or fall fish, *S. bullaris*, I found no other fish than salmon in the stream. One bright-colored male salmon as I took him from the brook discharged milt from the pressure of

my hand. This particular fish I caught in swift water where it ran over gravel. I hope Brother Mather will have an opportunity to interview these young things that were graduated from his University at Cold Spring Harbor before they are sent to Prof. Baird. It would have been an easy matter to catch a hundred yearlings during the time I was at the brook, and in their eagerness to take the lure they jumped clear above the water. After catching the first salmon Mr. Cleveland exclaimed: "If that beggar weighed thirty-two pounds" (he had in mind a salmon caught this summer by Mr. H. P. Wells) "and game in proportion, and I had fought and killed him, it would have taken just six mouths to recover from the excitement." The Clendon brook is posted its entire length and the people are interested in protecting the fry that have been deposited therein by the United States Fish Commission. I trust that you will receive the salmon in good order. I send but one of the smaller size, as the other and larger salmon gave no kind of show to take the hook.

A. N. CHENEY.

[We saw the fish at Fulton Market and they have gone to Washington.]

**THE OYSTER PROBLEM ACTUALLY SOLVED.**  
A NEW SYSTEM OF OYSTER CULTURE.

**DURING** the five years that I have been engaged upon the study of the oyster problem, I have never lost sight of the practical aspect of it, and have worked from the beginning in the hope that I might reach some really valuable results. In the belief that what I now have to present is practical and founded upon an appreciation of the essential principles involved, I offer it to the consideration of oystermen, especially those who have had experience in the use of cultch for the purpose of collecting spat. The U. S. Fish Commission, under whose auspices I have been able to conduct my experiments, deserves the greatest credit for the interest which its chief, Professor Baird, has uniformly shown in this, one of the most important of all the problems brought before it for solution.

The developments made within the last six years show that the solution of the most important problems in oyster culture, by means of artificial methods, is possible. This may seem an extravagantly sanguine view to take of the matter, nevertheless it is true that it is actually possible to begin at once with the knowledge now in our possession, and not only be successful, but also be so to a degree which must completely revolutionize the business of the bed-culture of this mollusk in open waters.

The results of Brooks, Winslow, Rice, Mather, McDonald and myself in this country the public is already more or less familiar with. In Europe Mr. Bouchon-Brandely, Professors Hock, Horst and Möbius have been equally active. Over twenty forms of incubating apparatus have been used by the writer in his own experiments. In none of this apparatus—except in one form of it, I am obliged to admit—was it found that results of startling economic importance were obtained. While this is true, it is nevertheless a fact that observations were made and results obtained which indicate that there is a feasible method of spat culture of unlimited productiveness. All that is needed is to bring together the proper combination of conditions which it is now proposed to indicate on the basis of well-known facts which may be verified by any one who will take the trouble to do so. Unable or unwilling at first to abandon the cumbersome and expensive method of spat culture practiced in Europe, our results have hitherto been of little practical value. This resulted from a radical misapprehension of what were the essentials of a rational method. While the work has been immediately fruitless, mediately it has not been so, for the light gained as the result of all the work of others as well as my own, now enables me to state with certainty why we have failed. Failure is a harsh word, and it is an humiliating one as well; but it will soon be seen that we have been cultivating a lot of fallacies and erroneous conclusions which led to it. In a word, we have neglected to think about what we have observed, so as to elaborate a practical theory of spat culture.

The elementary principles of the new theory of oyster, or rather of spat culture, which I here propose are the following:

1. Oyster embryos, under ordinary conditions in open water, diffuse and affix themselves throughout the three dimensions of such a body of sea water. This is a well-known and readily verifiable fact.
2. The fry will adhere to smooth surfaces as well as to rough ones.
3. The surface upon which spating occurs must be kept as free as possible from sediment and organic growths, in order that the tiny young mollusks may not be smothered and killed during the most critical period of their lives.
4. Artificial fertilization of the eggs or the oyster is feasible, and will become an important adjunct to successful spat culture.
5. Water charged with embryo oysters may be passed through a steam pump without injury to such embryos.
6. Oyster fry adheres to the under surface of shells or other collectors most abundantly because the lower side is cleanest and most favorable to the survival of the animals.
7. The spat of the oyster will grow and thrive with comparatively little light.
8. The specific gravity of the water may range from 1.003 to 1.0235.
9. The most favorable temperatures of the water for spating seem to be from 68 degrees to about 73 or 80 degrees Fahr.
10. Spating will occur just as freely in ponds or tanks as in the open water.

These are well ascertained elementary facts and upon them we must base our new method, which is essentially a system of spat culture, or method of rearing seed oysters for the purpose of cultivation on the open beds or any suitable bottom. We must, however, first of all throw aside as too expensive any and all systems in which tiles or slates are used, especially if these must be fastened together in nests and coated with lime and cement, as practiced in Europe. Oysters are too cheap in America to be produced by any of the old-fogy systems which are available there, as it will not pay to flake off the spat from the collectors under ordinary circumstances in cultivating the American oyster for market, because of its low price.

The thing to do is to arrange the collectors used in such a way as to expose an enormous area of surface to which the billions of fry floating about in the water may affix itself. According to the first principle stated above, we found that oyster fry would diffuse and affix itself to cultch throughout the three dimensions of a body of water. The collectors must therefore be so arranged as to occupy these three dimensions. It will be obvious to any one that such a method is applicable in a way which will come into competition with the older methods in vogue in Long Island Sound. To effect this it is proposed to provide a pond, natural or artificial, and connect it by way of a long zigzag canal with the open water. The area of the pond should about equal the area of the canal. Both the canal and pond should be of about the same depth, or say about 3½ feet at low water. No filters or any appliance of the kind is needed, except perhaps a screen at the mouth of the canal to keep out starfishes, crustacea and predaceous mollusks.

The canal is provided with ledges near the top to support the receptacles for the cultch. These are formed of vertical wooden strips six inches wide, six feet long, and secured to each other parallel and three feet apart by a crosspiece at the top and two horizontal side-pieces six inches wide, secured two feet six inches from the top of the vertical pieces. Coarse wire netting is then secured to the edges of the vertical strips below the two parallel cross-pieces. This netting will then form, with the wooden frame, a basket three feet wide, three feet deep, and six inches thick. Such a basket will hold some-

what over three bushels of oyster shells as cultch. The two cross-pieces which project beyond the vertical pieces will support the receptacle with the shells which it contains. One of these is allowed to every running foot of canal, the receptacles being placed six inches apart. A pond forty feet square and accommodating a hundred bushels of spawning oysters, will supply enough fry for a canal 400 feet long and holding 1,200 bushels of shells as cultch in 400 receptacles. The latter will cost \$70 per hundred, or \$230 for 400 feet of trench. One bushel of oysters will yield about one billion of fry. The pond with its hundred bushels of spawning adults will, therefore, yield about 100 billions of fry. This vast multitude of oyster brood will be wafted back and forth through the collectors by the tides 300 times during the spawning season, which lasts for ninety days. That is, 100 billions of fry will be wafted through 1,200 bushels of shells 300 times during the season. These shells can be kept clean by vibrating the receptacles on the ledges which support them. It will thus be seen that on one-tenth of an acre I can place as much cultch as could ordinarily be placed on four acres. Or, by my method, on one acre I can put down as many shells as could be put on forty acres by those who simply sow the shells; that is to say, the business of getting "sets" for seed can be condensed so as to cover only one-fourth of the ground now covered.

The plan as set forth above is not founded merely on a specious hypothesis, but is justified in detail by the facts observed by myself in the course of the experiments instituted by me during the period covered, as already stated and under the auspices of the U. S. Fish Commission. In nature the theory is also abundantly verified, as at Fortress Monroe, Wood's Holl, and Cohasset for example. The full-st justification of the conclusions above presented is also given by the more recent results at St. Jerome's Creek, as well as by the results of experiments instituted by Blackford and Mather. The details are, however, given at length in an illustrated article of mine, now ready for publication by the U. S. Fish Commission, and entitled: "An Exposition of the Principles of a Rational System of Oyster Culture, together with an account of a new and practical method of obtaining oyster spat on a scale of commercial importance."

Thousands of acres of the flat, marshy land skirting the Chesapeake may now be converted into establishments for the culture of oyster spat or seed oysters, to be afterward sown on the open beds and allowed to grow to a marketable size. The future of the oyster industry in the South is henceforth assured, all that has been needed is the adoption of a rational, economical method of spat culture, such as the one here proposed. This system of plant, if adopted, will pay for itself in fifteen months in its yield of seed oysters alone. This ought to be sufficiently encouraging to the most conservative oystermen, whom it is proposed to convince of the feasibility of the new system whether they now choose to believe it or not.

I may fitly close this brief notice of the new method by an extract from the concluding part of my forthcoming paper, already alluded to: "It has been found that even the sowing of shells is profitable, as has been conclusively demonstrated; and in one type of culture, namely, that which is practiced in deep water, it is probable that it is the only practicable method which will be devised for a long time to come. While that system is, to a great extent, wasteful and at times uncertain, for the present, at least, there seems to be no other which can be as economically and successfully operated over large navigable areas. Large areas operated by one individual or corporation cannot, however, always be controlled, or only exceptionally, under the existing laws of Maryland and Virginia. In those States, however, where it is possible to command the right to natural areas of water which are more or less nearly landlocked, the system of merely sowing shells would be positive; wasteful and not in conformity with the results attainable under the guidance of the proper knowledge. It is found in the practice of shell sowing that extensive areas will sometimes fail to produce any spat. This is apparently due to the presence of currents, which have swept the swimming fry off of the beds, or to the presence of sediment, which has put an end to the first stages of the fixed career of the youngest spat. Even after the spat is caught great destruction may occur through the inroads of starfishes, or a too rapid multiplication of worm tubes, built by tubicolous annelids over the cultch and spat. The latter is sometimes smothered in vast numbers from the last-mentioned cause, as has been recently discovered by Mr. Rowe. Such casualties are rendered either impossible or readily observable during their early stages by the use of the method of inclosing the cultch in suspended receptacles, as suggested in this paper. The wire netting will effectually protect the young spat against the attacks of large starfishes, and no growth of barnacles, tunicates, worm tubes or sponges would be rapid enough during the spatting period, judging from an experience extending over several seasons, to seriously impair the usefulness of the cultch used in the suspended receptacles. \* \* \*

"The maximum efficiency of the cultch is not realized in any of the old forms of collectors, for the reason that the cultch cannot be kept clean. Secondly, because both sides of the cultch cannot be exposed to the passing fry. Thirdly, because the fry cannot be compelled to pass over and among the cultch repeatedly. Fourthly, because the cultch is scattered over too great an area, and throughout only one dimension of a body of water, namely its horizontal extent, whereas it is possible, as I have shown above, to do far more; that is, to avail ourselves of the possibility of obtaining spat throughout the three dimensions of a body of water charged with embryo oysters in the veliger condition. There are good and sufficient reasons for my assertion that cultch has hitherto been wastefully and unscientifically applied. With this I must conclude this exposition of the principles of a rational theory of oyster culture, a subject which has received the attention of many investigators, none of whom have, however, struck at the root of the question and allowed themselves to be guided by obvious and readily verifiable facts. In the hope that I have made both the theory and practice of my new method clear to the reader, who, if he should happen to be an oysterman, will, I hope, at least give me the credit of being honest and sincere in my intentions, and whether he feels inclined to ridicule or to adopt my conclusions, I feel very certain that what I have formulated in the preceding pages will become the recognized doctrine and practice of the future."

JOHN A. RYDER.

**CARP FOR OHIO.**—The annual distribution of German carp, under the supervision of the Illinois State Fish Commission, will commence about November 1 to 15. All who have ponds prepared for their culture and desire fish should make application at once. Each applicant will receive twenty carp. Applications should be in writing, stating location of pond, area and average depth of water and whether free from other fish or not, giving nearest express office and name of post-office. Applications should have the indorsement of a member of the general assembly. Applications will be filed, entered and numbered as received and fish shipped in same order. All applicants will be notified in advance of shipment. Application can be made to either of the commissioners: N. K. Fairbank, President, Chicago; S. P. Bartlett, Secretary, Quincy; Maj. Geo. Breunig, Centralia.

**LIVE SOLES IN NEW YORK.**—Capt. Hamilton Perry, of the White Star steamer Britannic, arrived in New York on Monday last with nine live soles for Mr. E. G. Blackford, sent by Mr. Thomas J. Moore, of the Liverpool Museum. They were brought in the hanging globes known as "Mortimer's Ship Aquaria," and arrived in good order. The fish are of the size of a man's hand, and Mr. Blackford has offered them to Prof. S. F. Baird, United States Commissioner of Fisheries, to be disposed of as he thinks proper.

**MR. SILK AND NEW JERSEY BASS.**—Mr. W. T. Silk, the pisciculturist, who came to this country from England about a month ago for the purpose of securing a large number of black bass for stocking purposes in Great Britain, is having a hard time of it. During a previous visit Mr. Silk and Fish Commissioner Blackford had a flare-up because the bass Mr. Silk had collected to take home were netted in Greenwood Lake. Prior to Mr. Silk's coming this year he arranged with certain Greenwood lake fishermen to catch for him about two thousand bass. Anticipating trouble if the fish were taken from the lake, the fishermen decided to catch the bass in Lake Wawayanda, a beautiful sheet of water on the crest of Bellevue Mountain, which is about eight miles to the westward of Greenwood Lake. Many fish were caught, ostensibly by hook and line. They were to be sent to New York on September 30, for Mr. Silk had arranged to return home by the White Star steamer Adriatic. The three tanks he brought over with him were put on board and filled with water for the reception of the fish. Just before the steamer was to sail Mr. Silk learned that the parties who had contracted to furnish the bass had become frightened and returned the fish to the lake. It has now leaked out that this was done because the fishermen found they were watched by persons in the employ of the New York State Fish Commission. Commissioner Blackford, it is said, has announced that no bass taken in New York State shall leave this city in Mr. Silk's charge, except those that it can be proved were taken in a legitimate way—that is, by hook and line. Mr. Silk is in great trouble, and his tanks, branded with the Marquis of Exeter's name and address, are now heaped up on the White Star dock. Mr. Silk says he has no desire to break the law, but that he feels that he should be permitted to carry to England such fish as are caught legally. Professor Baird of the United States Fish Commission, having heard of the trouble, sent Mr. Silk this week 250 small black bass from the United States Hatchery at Wytheville, Va. The fish arrived in good order, and are now on Long Island awaiting the departure of Mr. Silk for home. These fish are a present from the United States to the Marquis of Exeter.—*N. Y. Herald.* The cause of Mr. Silk's troubles was the Passaic County Fish and Game Protective Association. The secretary of this association some ten days ago received information that Mr. Silk was endeavoring to get hold of a lot of fish from Greenwood Lake, and remembering the dishonorable and unsportsmanlike manner in which Mr. Silk got his fish a year ago, steps were at once taken to prevent him from carrying out his project of netting Greenwood Lake. Through the efforts of the association it was learned that Mr. Silk had paid Warren Aldrich, who lives at the upper end of Greenwood Lake, one hundred dollars to get him a lot of bass. Mr. Aldrich evidently had an offer of better pay, for he notified the guides and natives about the lake that he would pay five cents each for black bass and that he would take ten thousand of them. Netting in Greenwood Lake is difficult in the New Jersey portion of the lake, and as Mr. Aldrich also lived by the New York part of the lake the secretary of the association communicated with Mr. Eugene Blackford, the N. Y. State Fish Commissioner. This gentleman promptly responded and sent Mr. J. H. Godwin, Jr., of Kingsbridge, one of the New York fish protectors, to the lake. Mr. Godwin worked in concert with the association and it was ascertained that Mr. Silk also expected to get a lot of bass from Wawayanda Lake and that arrangements to this effect were carried out. Some bass were caught in Greenwood Lake, but the business was detected in time to prevent their shipment, despite Mr. Silk's hurried orders to send them to New York. Mr. Silk worked very quietly, even going so far as not to sign his name to communications he sent to Mr. Aldrich, but he was not quiet enough about it and consequently his project failed. Had it not been for the Passaic County Fish and Game Protective Association, Greenwood Lake would have lost a large number of bass.—*Paterson (N. J.) Press, Oct. 12.*

**THE NEW YORK FISH COMMISSION** met yesterday and appropriated \$26,000 for the ensuing fiscal year. The president was directed to send to Oregon for some specimens of the valuable trout known as the *Salmo purpuratus* with which the different streams of New York State may be stocked. Mr. Blackford was authorized to communicate with the German Fisheries Commission with a view to effecting an exchange of eggs of the German brown trout for eggs of our rainbow trout. Commissioner Sherman reported that the Adirondack fishery is now completed and the employees are engaged in obtaining spawn for the purpose of stocking.

**CARP FERTILITY.**—The Newark *Call* reports: "A carp pond at Moorestown, belonging to Samuel K. Wilkins, treasurer of the American Carp Cultural Association, was drawn off on Monday and found to contain over a million small carp. They are the progeny of thirteen fish that are now three years old, and measure over two feet in length. The young fish (three weeks old) measure about an inch in length."

All lovers of nature will thank Mr. George A. Musgrave for his protest to a London paper against the wicked cruelty by which millions of bright plumaged birds are so ruthlessly sacrificed to fashionable whim and caprice. "In April," says Mr. Musgrave, "I went to an auction room, and, after looking at the bodies of hundreds of birds, ascertained that between December, 1884, and April, 1885, there had been sold 6,823 birds of paradise, 4,974 Impeyan pheasants, 770 so-called Argus, 404,364 West Indian and Brazilian birds, and 356,389 East Indian birds of various kinds. Leaving the city, I went to another district, and there saw the birds being mounted for the milliners, upholsterers, and dealers in fancy articles. Pursuing the birds still further, I traced the breast of a *Lophophanes impeyanus* to a servant's Sunday hat, and some humming-birds and a kingfisher to a shop in a popular watering-place, where cabinet photograph frames were adorned with three birds and a dead kitten. At first I was inclined to believe that, in spite of the numbers of birds sold, the demand for them was confined to people whose taste was gratified by a vulgar display of what had the appearance of costliness." In this belief, however, he found himself mistaken. Just now there is, it seems, a craze for yellow, and Mr. Musgrave tells us how he heard of an order being given by a young English lady for a dress to be trimmed with canaries. We are human, but this young lady deserves to be pecked to death by sharp-beaked birds. "Fortunately, before the order was carried out, she, being capricious, changed her mind, so only eight little birds were sacrificed to the prevailing craze for yellow."

A familiar Parisian feature is likely soon to disappear—the toy cannon in the Palais Royal, fired daily by the sun at noon ever since 1788. The tiny piece is the delight of the French *bébé*s and their nurses, while even many sober elders set their watches by the daily report.

#### POINTS WORTH CONSIDERING.

1. Because of the compact style of its typography the FOREST AND STREAM actually contains, weekly, more reading matter pertaining to its chosen field than is found in any similar publication in the world.
2. In general excellence the reading columns of the FOREST AND STREAM are of a higher grade than those of any similar publication in the world.
3. Taking into account the amount and the character of weekly reading given, the FOREST AND STREAM is away ahead of any similar publication in the world.
4. If a sportsman wishes a sportsman's paper, he will be better suited by the FOREST AND STREAM than by any similar publication in the world.

## The Kennel.

Address all communications to the Forest and Stream Publishing Co.

#### FIXTURES.

##### BENCH SHOWS.

Dec. 15, 16, 17 and 18.—First Annual Dog Show of the Western Connecticut Poultry, Pigeon and Pet Stock Association. Frank D. Hallet, Superintendent, Winsted, Conn.

April 6, 7, 8 and 9, 1885.—Second Annual Dog Show of the New England Kennel Club. Jean Grosvenor, Secretary, Boston, Mass.

##### FIELD TRIALS.

Nov. 9.—Second Annual Field Trials of the Fisher's Island Club, for members only. Max Wenzel, Secretary, Hoboken, N. J.

Nov. 9.—First Annual Trials of the Western Field Trials Association, at Abilene, Kan. Entries close Oct. 15. A. A. Whipple, Secretary, Kansas City, Mo.

Nov. 12.—New Jersey Kennel and Field Trials Club. Field trials for members only at Fisher's Island. A. P. Vredenburg, Secretary, Bergen Point, N. J.

Nov. 16.—Seventh Annual Field Trials of the Eastern Field Trials Club, High Point, N. C. Entries for All-Aged Stakes close Nov. 1. W. A. Coster, Secretary, Flatbush, L. I.

November.—Fourth Annual Trials of the Robins Island Club, Robins Island, L. I. for members only. Wm. H. Force, Secretary.

Dec. 7.—Seventh Annual Field Trials of the National Field Trials Club, Grand Junction, Tenn. Entries for Derby close April 1. B. M. Stephenson, La Grange, Tenn., Secretary.

#### A. K. R.—SPECIAL NOTICE.

**THE AMERICAN KENNEL REGISTER**, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (50 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription \$1.50. Address "American Kennel Register," P. O. Box 2882, New York. Number of entries already printed 2794.

#### ABOUT COCKER SPANIELS.

Editor *Forest and Stream*:

The more I read and hear about cocker spaniels the more I get "mixed" concerning them. I have talked with men who have judged them, men who have bred them, and have tried to understand the "Senex" papers on the subject, with the same result, am mixed, very mixed.

I have carefully studied the two standards, and it seems to me that the I. C. S. Association standard is a copy, almost word for word, of the A. C. S. standard. The only difference of any account that I can perceive is in the weight. I have bred cockers (and now own twelve) and expect to breed many more of them, and therefore I would like to have the matter straightened out as it were. So I have a suggestion to submit that may make "Senex" positively howl with rage and cry aloud for protection to the dear little cockers of his boyhood days. Before I make my suggestion I want to ask a conundrum, which I would be glad to have answered by a representative cocker man through your columns. We will suppose a cocker, weight say about 26½ pounds, wins several prizes, and finally wins in champion class a few times. After a while a competitor comes from the open class and "downs him" and with a likelihood of repeating the process show after show. By feeding the first mentioned dog up to say 28½ pounds, can he or she be entered in the field spaniel open class and commence to scale the ladder again? I cannot see what there is to prevent it. The dog is not a cocker because he is over 28 pounds, but he must be something. Because a poor little spaniel gets a little obese, as his friend man is apt to do, is it right that he should be completely wiped out of his status in dog society by a cast-iron rule that says to him, "If you dare to get over 28 pounds you are no longer a cocker but a wretched—nothing!" No such ridiculous rule applies to any other breed of dog, and why should the so-called cocker be treated any different? A pointer may be under the 50 pounds limit, but if he grows a little stouter he is still a pointer and can be shown in the class over 50 pounds I suppose, anyway he is still a pointer, isn't he? Weight does not make a breed; but this is actually what every dog show premium list practically says.

Savage reader, do you see my difficulty? If the dog I have mentioned is not a "cocker" what is he? Everybody I have talked with on the subject, and among them at least two who have judged "cocker" at representative dog shows, say that he would be a field spaniel! Very good. Now, if he is a field spaniel, now he is slightly over 28 pounds in weight, why the dickens should he be called a "cocker" when he was a little slighter, so to speak?

Having ranged on the subject somewhat, I now make my suggestion, which is—somebody hold "Senex"—to wipe the "cocker" completely out of existence and call them all field spaniels, divided in two or three classes by weight, on the same principle as the pointers are now judged. For my part I would say two classes only are desirable—over and under 28 pounds; but if "Senex" is to be considered by all means let there be three classes, say under 22 pounds, over 22 and under 30 pounds, and over 30 pounds. Everybody would then be happy, "Senex" could disband his pet I. C. S. Association and join hands with the other spaniel men, and the American Field Spaniel Club would be a booming success. Spaniel breeders would know what they would be driving at. The public would understand also and everything would be as lovely as "the flowers that bloom in the spring, Tra la."

I, therefore, as a spaniel breeder and exhibitor, call on the management of the kennel clubs in this country to expunge the word "cocker" from the premium lists of their future shows, and ask them to have two or three classes for field spaniels, arranged as they think best. I would be glad to have the American Spaniel Club (of which I am not yet a member) join with me in the matter. CAVE CANEM.

#### SPECIMEN BRICKS.

I.

Editor *Forest and Stream*:

As I am a subscriber to your weekly publication, the FOREST AND STREAM, and also to the *American Kennel Register*, I write to you for information on the following subjects: Please to state from whom I can obtain a handsome, well bred setter dog, English, Irish, Gordon or native, or a grade from these strains, about three years old, that is a remarkably fine animal in scenting faculties and is particularly very excellent and staunch on woodcock and ruffed grouse, a reliable and good retriever of all game from land and water, a prompt backer, with a gentle and not vicious disposition, and steady and staunch also on quail and snipe. I would require him to drop to shot, and would prefer lemon and white with dark eyes and black nose, or as much white as possible mixed with any other color, but would not object to any color with the qualities written, but would not desire great speed; rather a brisk, active, untiring hunter. Mention price and whether guaranteed. I wish also to ascertain about cocker spaniels and the ones weighing twenty-five to thirty pounds, for hunting woodcock and ruffed grouse in thick covert. Can they be used with success when entirely well broken and reliable retrievers from land and water, equal to that obtained by the use of setters and pointers, or are they superior for such work? Mention from whom a pair, thoroughly broken, can be obtained, with the price and any details about their weights and other matters connected with them that may be of interest; also whether guaranteed. I would require dogs, not bitches,