The Chestertown Transcript.

VOL. XVI. CHESTERTOWN, FRIDAY, JUNE 8, 1877 NO. 5.

MY CROSS.

The following very touching poem was written by a lady of this city. We are sure no mother can read it without feeling her heart swell and her eyes fill.—*Balto. Sunday News.*

I've come in wearily—into my room—
So tired, let me drop just here on the floor,
Outside the world is all beauty and bloom,
All sunlight and dewdrops, and flowret's perfume;
And *inside*, the shadows must dwell evermore!

Shadows, that drearily to and fro sway
Over me here in the darkness and gloom,
While I sit questioning all the long day,
"Why from my life should be taken away
Forever and ever its beauty and bloom?"

Questioning still, as I bend o'er the store
Of treasures so dear, that I can claim still,
O Father! O God! Who didst love Thine own child,
Bend down from Thy throne, in love's pity mild,
And help me to bow to thy will!

To bow to Thy will (let me think) *Thy will*
Which demands from me all that I most dearly love,
Yet takes it in tenderness (let me think still!);
To cherish, and lovingly guard from all ill,
In the beautiful temple above.

Thus with my hands clasped over my face,
"Now, O my God, for strength I plead,"
And then am calm for a little space,
For unto us all there comes the grace
We seek in time of need!

My treasures! (such hallowed remembrance they shed)
Lie here before me, all laid with care;
O Savior! O Christ! Who did'st weep for the dead,
Who groaned 'neath Thine own cross, bow down Thy head
In pity, and help *me* to bear!

Little dresses, so pretty, so soft and so white,
With a part of my heart in each stitch and each fold!
From the lace at the neck—a face, ever bright,
Peeps out with its smile and look of delight,
At some wonderful "true story" told.

In the dear tiny sleeve I can trace the round arm,
And here at the wrist the sweet, dimpled hand.
O let me entwine them, and feel the charm
Again of love's magic wand!

Do I not remember in my distress,
How cares were banished from heart and from brow,
Beneath the pure spell of this tender caress,
The touch of the arms, and the dewy lips' kiss,
And longingly yearn for them now!

Little skirts, all tucked and trimmed with care,
I've watched so oft with loving eyes,
ncing, stooping here and there
merry play, no more can share
Those games, so gay, so wise!

nd Oh! these little, little shoes!
"Help, O my Savior! Help, I pray!"
rusty, worn, with buttons loose,
d heels worn down—"Thou'll not refuse
hine help this bitter day!"

ttle feet! Dear little feet!
hat ever trod in paths so pure
hout thy pattering music sweet,
tout thy step so light and fleet
ow *can* I life endure!

here the tiny stockings rest,
e "nice new stockings" and the old,
brown and white—he loved these best,
ray and white—were worn the last,
the precious feet grew cold.

nd gloves and ribbons bright
the gifts love could bestow
re before me—and the light
s o'er the present's rayless night
the past's clear, sunny glow.

hours that come and go,
he present's cheerless hours,
tears unceasing flow
y cheeks, so pallid now,
bloosming as the flowers!

life for flowers and me
remember—is so brief,
the storms blow chillingly
while—we soon shall be
p"—Oh! blest relief!

ES.—It is an excellent rule to all disputes, that men should words and hard arguments; that d not so much strive to vex as an opponent.

---

ay nothing respecting yourgood, bad, or indifferent—noe, for that is vanity; nothing t is affectation; nothing inthat is silly.

He that is teachable.

CAUGHT IN HIS OWN TRAP.

Lennox Ray sprang from the train just as the June sunshine was dropping down the west in a flood of golden glory, and the air was fragrant with the perfume of new mown hay, and dewy with approaching twilight.

'Well, this is rather purer than London air,' sighed Lennox, drawing a deep breath of delight, as he hastened up the green lane to the wide, old-fashioned farm-house, carrying his valise in his hand. I wonder if Nannie got my note and is looking for me. Hallo!'

This last exclamation was drawn from Mr. Ray's lips by a big ripe cherry, which, descending from above somewhere came into sudden contact with his nose. He looked up and there, perched like a bird upon the bough of a huge cherry tree, and looking down at him with dancing eyes and brilliant checks, was a young girl, pretty and willful enough to set a man crazy.

'How-do, Lennox? Come up and have some cherries,' was her mischievous greeting, with saucy dimples playing about her crimson lips.

'Nannie! Is it possible?' exclaimed Lennox, sternly.

'What! that the cherries are ripe?—Yes, and splendid, too. Have some?' returned the nymph, coolly holding out a great cluster.

'Nannie, will you come down from there?' said Mr. Ray, not seeming to notice the cherries.'

'Yes, to be sure, now you have come, and I have had all the cherries that I wanted.'

And while Mr. Ray looked on in stern disapproval, the young witch swung herself down from her perch, and lit on the grass at his feet.

'Now, don't look so serious, Lennox, dear,' said she, slipping her little hand in his with a coaxing motion. 'I know it's tom-boyish to climb the sherry tree, but then it's such fun.'

'Nannie, you should have been a boy,' said Lennox.

'I wish I had; then I wouldn't have everybody scolding me if I happened to move. No, I don't either; for then you wouldn't have fallen in love with me.—What made you, any way, dear?' with a fond glance and a caressing movement.

'Because you are a sweet darling!' answered Mr Ray, melted in spite of himself. 'But I do wish, Nannie, you would leave off those hoydenish ways, and be more dignified.'

'Like Miss Isham?' asked Nannie, smiling.

'Miss Isham is a very superior woman, and it would not hurt you to copy her in some respects,' said Lennox, coldly.

The tears sprang into Nannie's eyes at his tone; she loosened her arm from his, and dropping down on the emerald grass at his feet, began to braid a bracelet of the long blades, in silence, with a grieved expression around her sweet mouth which he did not see.

'There,' cried Lennox, pettishly. 'Now you look more like a five-year old baby than a well-bred young lady.'

'Nannie threw away her bracelet, and got up again

'I didn't mean to vex you. Shall we go in?' he said, gently.

They went into the parlor, and Mr. Ray took a seat a in great arm-chair, while Nannie flung open the window and dropped down on her knees beside it, letting her glossy curls fall in a great shower on the window-sill.

'Now, don't do that!' exclaimed Mr. Ray, drawing a chair near his own.—'Come here, and sit down like a rational being'

Nannie gave a rueful glance at the stiff-backed chair, but giving her curls a toss backward, obediently went and sat down.

'I wish you would put up those flyaway curls, and dress your hair as other young ladies do,' said Mr. Ray. 'And, see here, Nannie, I want to have a talk with you. You know I love you; but, in truth, my dear, my wife must have something of the elegance of refined society. Your manners needs polish, my dear.'

Nannie reddened, and her scarlet lip curled a little, but she said nothing.

'A few weeks in fashionable circles will be a great benefit to you,, and I wish you to have the opportunity. In short, dear, I came down to tell you that my sister Laura is making up a party to visit some watering-place this Summer, and she wishes you to be one of the number. And I wish you to accept the invitation, Nannie.'

'Are you going, Lennox?' asked Nannie.

'No; my practice will not allow it.—But I shall see you several times. You will go?'

'Oh Lennox, don't make me!' sobbed Nannie, hiding her face on his shoulder, as a vision of his stylish and haughty sister rose before her. 'I don't want to go. I hate fashionable society! I don't want to be polished. I'd rather stay here in the country, and not wear any bonnet, and climb cherry trees every day.'

'Nannie, I am surprised at this display of childishness. I must insist upon more self-control,' said he, coldly.

'But don't send me away; don't Lennox!' she pleaded.

'I must,' he returned, but more gently, softened a little by her agitated eagerness. 'It is for your good, Nannie, and you must consent to go. Will you?'

The supper bell rang at that instant, and anxious to escape before the rest of the family came in and saw her tears, Nannie hastily answered, 'Yes; let me go, Lennox!' and ran out of the room, and up stairs to her own chamber.

They were at supper before she came down again, with smooth curls and no traces of tears, but with a bright light in her brown eyes, and a firm look on her pretty face face: and as she went through the hall out to the vine-shaded porch where the tea-table was set, she murmured:

'Yes, I'll go. And I'll teach you one lesson, Mr. Lennox Ray. See if I don't.'

It was Lennox Ray's intention to join his sister's party in July, but his lawbusiness prevented him. When Nannie received the letter expressing his regrets, she only smiled, and said to herself:

'All the better. I shall have time to learn my lesson more thorouoly by September, Mr. Lennox.'

It was nearly the middle of September before Mr. Ray, heated, dusty and weary entered his room in the Scarborough hotel where his sister's fashionable party was stopping.

'Dear little Nannie,' he said, as he made, a careful toilet, before going down stairs; 'I'm dying to see her, and I know she'll be glad to see me. A moment of her sweet naturalness will be puite refreshing after all these artificial women. They don't know I've come, so I'll just go down and surprise them.'

As he entered the apartment, amid a flash of jewels and rustic of silks and laces, he met his sister Laura.

'Lennox! you here?' she said, giving him two white hands.

'Yes. Where's Nannie?'

'She was on the terrace, talking with a French count, a moment ago. Ah, there she is by the door.'

'Ah!' said Lennox, dropping Laura's hand, and making his way toward the door.

But it was difficult, even when he drew near, to see in the stylish, stately lady, whose hair was put over a monstrous chignon, and whose lustrous robes swept the floor for a yard, his own little Nannie of three months ago.

Lennox strode up with scarce a glance at the bewhiskered dandy to whom she was chatting, and held out his hand with an eager exclamation:

'Nannie!'

She made a sweeping courtesy, and languidly extened the tips of her fingers; but not a muscle moved beyond what accorded with well bred indifference.

'Ah, good evening, Mr. Ray.'

'Oh, Nannie, are you not glad to see me?' said Lennox, feeling his heart chilled within him.

'Oh, to be sure, Mr. Ray, quite glad. Allow me to present Count de Beaurepaire. Mr. Ray, monsieur.

Lennox hardly deigned a bow to the Frenchman, and offered his arm to Nannie.

'You will walk with me a little while?' he said.

'Thanks; but the music is beginning, and I have promisde to dance with Mr. Blair.'

'But afterward?' said Lennox, the chill growing colder.

'Thanks again; but I am engaged to Captain Thornton.'

'When, then?' demanded Lennox, with a jealous pang.

'Ah, really my card is so full, I hardly know. I will try to spare you a waltz somewhere,' she said, with an indifferent glance.

Lennox bent down, and spoke, with bitter reproach in his tone:

'Good heavens, Nannie! what affection is this?'

She favored him with a well bred stare.

'Pardon! I do not understand you, Mr. Ray.'

And taking the arm of her escort, she walked away with the air of an empress.

Lennox sought his sister.

'Laura, how have you changed Nannie so?' he demanded.

'Yes, she is changed—greatly improved. Isn't she perfect?'

'Perfect? Rather *too* perfect to suit me,' growled Lennox, turning on his heel with a realizing sense that he was caught in his own trap.

'To-morrow I shall see more of Nannie,' he thought.

But to-merrow, and to-morrow, and to-morrow, it was always the same; and "'that elegant Miss Irving," as they styled her, was always in demand. She played the *role* of an accomplished, icy-hearted coquette to perfection; and poor Lennox, from the distance at which she kept him, looked on almost heartbroken, varying between wrath, jealousy, pride, and despair.

'Nannie,' said he, one morning, when he found her a moment alone, 'how long is this to last?'

'How long is what to last?' asked Nannie, inocently.

'How long are you going to remain the conventional creature you are?'

'I believe you wished me to come here to improve my manners, Mr. Ray; to acquire the elegance of society,' she said, coldly.

'But, Nannie—'

'Your sister thinks I have become an apt pupil.

'Yes, too apt, by heavens!' cried Lennox.

'Well, if you ain't pleased with the result of your own advice, I am not to blame. You must excuse me now. Mr. Ray; I am going to ride with the Count de Beaurepaire.'

And with her sweetest, hollowest smile she made a graceful gesture of adieu, and left him, sick at heart, puzzled and disgusted.

That afternoon, as Laura and Nannie were about dressing for the evening, Lennox walked, unnounced, into Laura's little parlor, where they sat alone.

'I thought I'd drop in and say goodby before you went down stairs,' said he. 'I leave for London to-night.'

Laura elevated her eyebrows a little:

'Sudden, isn't it? But since you are going, I will give you some commissions.

'You needn't. I shall only stay in town a day.'

'Indeed! Where are you going?'

'Oh, I don't know!' was his savage reply.

Laura gave him a look of cool surprise.

'At least you will take a note to George for me.'

'Yes, if you get it ready,' said he, ungraciously.

'Very well, I will write it now.'

Laura went to her own room stood moodily at a window. Presently Nannie, who had not spoken one word, came and stood near him.

'Are you really going away?' she asked.

'Yes, I am,' was the short answer.

'And won't you tell us where?'

'I don't know myself—neither know nor care!' growled Lennox.

She slipped her hand in his arm, with the old caressing movement he remembered so well, and spoke gently, using his name for the first time since he came.

'But Lennox, dear, if you go away off somewhere, what shall *I* do?'

He turned suddenly, and caught her to his heart.

'Oh, Nannie, Nannie!' he cried, passionately, 'if you would come back, to me, and love me—if I could recover my lost treasure, I would not go anywhere. Oh, my lost love, is it too late?'

She laid her face down against his shoulder, and asked:

'Lennox, dear, tell me which you love best, the nannie you used to know, or the fashionable young lady you found down here?'

'Oh, Nannie, darling!' he cried, clasping her closer, 'I wouldn't give one precious toss of your old brown curls for all the fashionable young ladies in the world. I wouldn't give one careless ring of your merry laugh for all the polished belles in society. I wouldn't, my darling, I wouldn't.'

Nannie laid her arms caressingly around his neck, and said, softly:

'Then I think you will have to take your old Nannie back again, and pet her and love her as you used to do; for I am as sick and tired of the fashionable young lady as you can be, Lennox, dear.'

And Lennox, passionately clasping her to him, begged to be forgiven, and vowed would not exchange his precious little wild rose for all the hot-house flowers in Christendom.'

'Laura!' Lennox called, tapping on Laura's door a little later.

'Well?' assumed Laura.

'You needn't write your note. I shall not go to town to-night.'

'Lennox, I never saw such a fellow to take fancies!' cried Laura. 'Are you crazy?'

'No; I have been, but I am coming to my senses now,' said Lennox.

* * * * * * *

Lennox and Nannie have been sedate married people several years; but I never heard that Lennox complained in the least of his wife's want of conventionality, or ever wished to pursue the acquaintance of the fashionable lady whom he met at Scarborough.

MARYLAND FISH CULTURE.

THE STATE HATCHING EQUIPMENT—THE SUSQUEHANNA FLATS—FISHING SHORES AND FLOATS—PROPAGATING GROUNDS—SCIENTIFIC STUDIES OF FISH, ETC.

[Correspondence of the Baltimore Sun.]

Havre de Grace, Md., May 21, 1877.

On an appropriation of ten thousand dollars a year the Maryland fish commission has accomplished a very great work in this State since it was authorized in 1874. Many millions of the chief food fishes of our waters—shad and herring—have been propagated and turned loose in the streams of Maryland, as well as in the rivers of other States, bringing in exchange salmon from California, carp from Europe, and other desirable food fishes. Not only these extensive operations on the water highways of the State, but in Druid Hill Park a fully equipped fish hatching-house, supplied with unique apparatus, has been erected, where millions of California salmon have been hatched and sent out to return in a very short while and establish themselves as regular, annual visitors to the fresh water tributary streams of the Chesapeake bay. Several ponds for breeding carp, &c., have also been established, but these enterprises, though useful, are of secondary importance to the great material interest of the State involved in the perpetuation of the supply of shad, which, with the herring have been threatened with extermination in our waters by the wholesale devices for their capture, every year becoming more and more extensive.

SHAD HATCHING EQUIPMENT.

Shad hatching operations were first begun on the Potomac river, the southernmost stream of Maryland, but were abandoned for the head waters of the Chesapeake and the Susquehanna flats, where the facilities for the work are greater. One of the first essentials was to secure skilled and intelligent assistance. Mr. T. B. Ferguson, the fish commissioner, found these requirements in Wm. T. Wroten, one of his trained men, who was sent into camp at Spesutia Island and Carpenter's Point. Other capable men were trained and regularly attached to the service. It was then necessary to secure rapid transportation between the various fishing shores, camps and the hatching grounds, so the steamer "Leila," of the Maryland oyster police force, was utilized for two years, but she proved to be of draught too deep for all purposes. Then an opportunity offered, and Mr. Ferguson purchased from Mr. Lorillard, of New York, his handsome and well adapted steam yacht "Lookout," at a price far less than its value, and much under what it would cost to build a much inferior steam vessel, and a steamboat of some kind had become absolutely necessary to secure the permanent efficiency of the commission.

STEAM TRANSPORTATION.

To-day I made a cruise on the Lookout around the field of present shad propagating operations. The equipment, labor and intelligence directed to this work are surprising. In the first place the fish commissioner's steamer has been fitted with apparatus of his own invention for the safe transportation of fish eggs, in which the embryo may be kept a day or two without interruption to the processes of nature, but rather facilitating them. The apparatus consists of a tank supplied with water from overboard by a steam pump, which may be kept in operation whether the steamer is going or not. Pipes from the tank connect with five inverted cones, in each of which as many as 200,000 eggs may be placed. The water supplying these egg chambers comes in from below, so that the eggs, which are of light specific gravity, are kept dancing midway of the vessel holding them. The cones are hung in gambrils similar to the rigging of the compass, so that no matter how violent the rolling of the steamer, the contents of the egg chambers are never spilled. The great object to be attained is secured—gentle and continued agitation of the eggs and the water in which they are placed from *below*. In salt water the pump is stopped, and the tank supply furnishes fresh water circulation.

UNITED STATES FISH CAMP.

At the wharf here, where the Lookout lay, is a station of the United States fish commission, with ten men, under Prof. James W. Milner, deputy United States fish commissioner. This gentleman, who is deeply interested in the great work of keeping up and increasing the food fishes of our watees, thinks very highly of the appliances Mr. Ferguson has invented. He says, what is obvious, that it is necessary to hatch myriads of shad every year in order to keep up the stock of the rivers against the wholesale draughts of seines two miles in length, to be found on every convenient shore, and against the destructiveness of the deadly gill nets, which glean the fields of every fish left by the great seines. It is believed that protective propagatiou can and will keep up the supply. The fishermen believe in the work, and afford every facility to the agents of the State and the federal government, who are in intelligent and active accord.

Mr. Milner's "station" was moored to the wharf near by the berth of the Lookout. It is a cabin built the full length and breadth of one of the mud machine scows from the old city yard at Baltimore. The cabin is divided into a kitchen, with range, sleeping berth, and a well furnished office, with desk, chairs, &c. The whole is a comfortable dwelling for busy men afloat, and has the advantage of houses on land, that it can be towed to any desirable location, and life is not devoid of interest on board in this half amphibious sort of a way.

FISH FLOATS.

But there is another life afloat on these Susquehanna flats equally novel. This is life on the "fish floats." These floats are peculiar to Maryland waters. During the months when not in use the floats tie up at Havre de Grace, where they may be seen looking like fishing villages on the water. When the season comes around they are towed into position and the fishery is opened and seine hauling begins. Some of the floats cover an extensive area, and are provided with horses to haul the seines, stables, salting-houses, ice houses, packing and cleaning shanties, huts in which fishermen and fishwives and children dwell, live-boxes, and sloping artificial shores to facilitate draughts from the water. Seven of these floats have operated on the Susquehanna flats the present season, though they have nearly all "cut out" at this writing. "Cutting out," it should be explained, is a literal term to indicate that fishing is stopped by cutting the meshes of the seine from the ropes of the bottom, or lead line, and the top or cork line. These floats were frequently visited during the season for ripe fish for propagating purposes.

In the immediate vicinity of the scene of operations too are the fishing shores of Fletcher Wilson, Wm. Wilson, Caruthers & England, Russells, where the seines are two miles long; Carpenter's Point, where there are two seines, each 1,100 fathoms in length; Washington Barnes, and others, not to speak of innumerable gillers everywhere.

HAULING SEINE.

The Lookout reached Capt. Wm. Wilson's shore just as an immense seine was bringing its draught to land, and a galley was carrying out another of equal size on the flood tide. The seine going out was carried in the stern of the galley, which was manned by thirty black oarsmen, who kept time equal to the precision of the galley slaves chained to their benches in the penal service of France. The seine which was coming in, was drawn by horse-power until it had been very nearly landed, when gangs of men waded out up to their middle, and taking hold of the ends of the great loup drew it on. When the bag of fish was grounded the under side of the seine was drawn further in, and a dozen cartloads of fish were turned over on the hot sands, the kicking and writhing mass scattering their scales as thickly in the air as spray on a rock beaten by the waves. The bulk of the catch was herring, tho' nearly half were "bug fish" which are used for nothing but manure.

STRIPPING SHAD.

From this haul Mr. Ferguson obtained only one or two ripe fish, male and female, which he stripped while they were kicking. Holding the female fish by the gills with one hand, the thumb and forefinger are passed with gentle pressure down the sides of the belly where the ripe roe lies, and the eggs come out in a stream into a vessel held for them. Another operator discharges the milt from the male fish at the same time or immediately afterwards, by a similar process, and a very few drops suffice to impregnate the mass. It is calculated that a full-sized ripe female shad will yield 15,000 eggs. After the stripping, water is added and the whole gently stirred and thoroughly mixed, when it is rapidly conveyed to the hatching boxes, where gentle motion and constantly changing water are essential to development. The great trouble experienced in our waters is that there is not sufficient current, and agitation must therefore be supplied artificially. The eggs will hatch out in from two to three days, but the greatest delicacy of handling is required to perfect the process. It is observed by the trained men engaged in artificial propagation, that the greatest number of ripe fish fit for stripping are obtained on the shores after dark, which is entirely practicable, as seine-hauling is prosecuted at night as well as by day. Mr. Ferguson's men frequently visit the shores at night with lanterns and apparatus, and are nearly always rewarded with several properly ripe fish.

MULTIPLICATION AND DIVISION.

Owing to the want of strong currents here it has been found that the inclined boxes used generally in rapid streams do not hatch satisfactorily. These boxes are made with wire gauze bottoms, to ride tilted at an angle of about 20 degrees and half immersed, the wind and current rocking the eggs so as to keep them constantly agitated. From the 17th to the 21st of May, inclusive, Mr. Ferguson turned loose into Maryland waters above the railroad bridge over the Susquehanna upwards of a million and a half of young shad artificially hatched. This is only a part of the season's work, the whole aggregating over five millions of young shad, estimated, which have been sent out to mature and return again as food and to go on multiplying. As the season does not end until the 10th of June it is expected the total will be much further increased. The distribution was made from time to time in lots ranging according to estimate from 50,000 to 500,000. At the same time several lots of 100,000 to 300,000 were turned over to the United States commissioner for distribution. Nearly all the shad hatching for the government commissioner is done by Maryland as compensation for valuable exchanges of the hatching product brought from other distant parts of the country, and from Europe as well, to stock our Maryland waters with new kinds of food fishes. This reciprocity and unison of action has been found advantageous to our State in many ways, and will be more so in the future.

HATCHING FISH BY MACHINERY.

But the most interesting point connected with the fish propagating system of Maryland is the central camp, at present located in Carrot Cove, mouth of North East river. Here are two more city yard mud scows, on which cabins have been built somewhat similar to the one already described, only that the whole area of one is a work shop, with carpeters' benches, &c., and machinery for hatching fish. The machinery is a five-horse power launch boiler and small engine to move a rod and revolving eccentric wheels, which work on bars connecting with frames on the outside, where sheet iron buckets are hanged. The buckets have wire gauze or sieve bottoms. The machinery operates to give a gentle rising and falling motion to the buckets, in which fish eggs have been placed, and then half immersed in the water of the river. The play of the machinery is calculated for about six or eight inches, and the motion is continuous night and day while there is anything in the buckets to hatch. The capacity of each bucket, twenty-five of which are now in use, is about 100,000 eggs.

There is no doubt that the inventor has reached the correct principle in the transporting apparatus on board the steam yacht, viz: agitation in a stationary vessel from below; but whether the up and down piston motion of moveable vessels immersed, like the buckets, is the best that can be done in still water, remains to be determined. For the present Mr. Ferguson is satisfied with his experiments, as he demonstrates that not the tenth part of the eggs die in the buckets before development that come to nothing in the inclined hatching boxes. So many difficulties, however, beset the delicate operation of artificial fish breeding at every stage that one is surprised even that the half is accomplished of what is done. The fish, after they come from the eggs, must be supplied with fresh water so often that it is a great performance to carry them safely in large milk cans long distances by rail for distribution. Then, too, it is desirable to transport them as young as possible, before they have received any food from the hands of man, for if they are taught to be dependent even in the earliest stages of life on outside help they lose the native aggressiveness upon which life and mature development depend.

SCIENCE IN THE CAMP.

Something of the nature of the embryo and the new born fish I learned in the cabin moored across the water street of the Carrot Cove hatching camp. Here I found in the floating domicile a scientific laboratory which had been just set up by Mr. H. J. Rice a fellow of Johns Hopkins University, Baltimore, come to study the early stages of shad development and pisciculture with the microscope, which has revealed so much wonderful biological data. My admiration was divided between the sacrificing student, who had willingly exiled himself for a week or ten days to a floating prison, and the wonderful things he showed me. These embraced living fish, which to the eye looked more like wrigling comas than anything else, but which under the microscope proved to be fish with the heart pulsating, and fish with great eyes, with a heart beating and blood corpuscles streaming, and thin lines indicating the places of the future spinal cord and alimentary canal. Some of the little fellows had yet the yolk bag hanging to them, from which they derived nourishment.

In a dipper half full of water there were a hundred or two mites of things, each looking like two dots with a tail between them. They moved as quickly as an electric spark, but Mr. Rice found no difficulty in catching them. He went a-fishing with a glass tube about a foot long, one end of which he put into his mouth and the other end of which he put into the bowl of water, and then moved the stem towards the little fish and drawing in the air from the tube the fish was caught.—Then he was gently deposited, with half teaspoonful of his native element in the hollow of a watch crystal. But here he kicked and darted about so much it was clearly impossible to get a focus on him, so the operator took another tube the size of a lead pencil, and, drawing with it some drops of ether from a phial near at hand, very soon quieted the gentleman, just as a dentist would put a patient to sleep when a snag is to be dug out. The ether did not kill; it only quieted and as the fish thus lay stupefied all his works, finer than any hair-spring of the finest watch, were subject to scrutiny. Mr. Rice had prepared specimens, hardening them in chromic or picric acid and alcohol, to cover the various stages of the embryo to development. In 12 hours after spawning the egg shows signs of life; in 48 hours the heart may be seen coursing; then the yolk-bag drops, and in less than three days the shad, then about the size of a small tadpole, is fully ready to enter upon the duties of life. It is wonderful that quickening comes so soon to the embryo.

There are many matters yet uncertain in the artificial propagation of fish; but cience goes to the bottom of things, and when we know the beginnings of life well, very much is accomplished. In the space of a short newspaper letter it is impossible to more than touch upon the interesting features of a developing system which has within one season added five millions of young food fish of a single variety to our own waters. This has been accomplished with the appliances yet rude, but sufficient has been stated to indicate how rapidly advancement is made, and what forces are to benefit one of the most important interests of Maryland. And the future is full of hope. There seems to be no doubt that fish may be multiplied by well-directed enterprise to such an extent that they will every season come back in shoals as large as before the days of two-mile seines and gilling. The field of labor is one of the most attractive to a mind imbued with thoughts of benefiting his fellows, and the possibilities are limit less.

☞ Out of suffering have emerged the strongest souls, and the most massive characters are seamed with scars. Martyrs have put on their coronation robes glittering with fire, and through their tears have the sorrowful first seen the gates of heaven.

☞ There is a growing conviction in the minds of smokers that a vest-pocket should be made deep enough to entirely hide a cigar from the scrutinizing gaze of the man who never has any.

☞ Toledo people are proverbially economical. A man who died in that city the other day left word that the door plate should be taken off and screwed on the top of his coffin.

©Maryland State Archives msa_sc3326_scm8204-0328