

DOCUMENT No. 13.

REPORT OF THE COMMISSION

APPOINTED UNDER

JOINT RESOLUTION No. 5,

ENTITLED

*“Joint Resolution Relative to the Preservation of Fish in
the waters and seas in and contiguous and near to the
State of New Jersey, within the jurisdiction
of the United States.”*

PASSED BY THE LEGISLATURE OF NEW JERSEY,

1888.

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REPORT OF THE COMMISSION

ON THE

JOINT RESOLUTION NO. 1

AND

REPORT OF THE COMMISSION

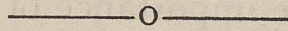
ON THE

JOINT RESOLUTION NO. 1

AND

REPORT

REPORT OF COMMISSION.



To the Honorable the Senate and House of Assembly of the State of New Jersey :

The Legislature, at its session of 1888, passed the following joint resolution, entitled :

“ Joint Resolution relative to the preservation of fish in the waters and seas in and contiguous and near to the State of New Jersey, within the jurisdiction of the United States.

“ WHEREAS, Serious complaints have been and are being made that numerous persons and parties have been and are, by various modes and devices, at all available seasons of the year, gathering and destroying unusually large quantities of menhaden and other fish in waters and seas in and contiguous and near to the territory of the State of New Jersey, and within the jurisdiction of the United States, and persist so to continue to gather and destroy such kinds of fish under the pretense of pursuing therein a legitimate and lawful occupation of using the same and the products thereof for manufacturing and various purposes other than food ; *and whereas*, serious complaints have been and are made that such gathering and destruction of fish, if so continued, will work a material injury to and diminution of fish useful and necessary for food in said waters and seas, to the great injury of the residents and citizens of the State of New Jersey, and detrimental to the welfare of the same ; therefore,

“ 1. BE IT RESOLVED *by the Senate and General Assembly of the State of New Jersey*, that three proper and fit persons be appointed by the Senate and General Assembly in joint meeting assembled, to ascertain, as far as possible, the facts pertinent to such complaints, and suggest such remedy as they may deem advisable in the premises, and make their report in writing to the present or next Legislature of the State, and also to our Senators and Congressmen during the present session of Congress, for their consideration and use.

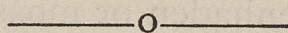
“ 2. *And be it resolved*, That the compensation and expense of the three persons so appointed shall be paid to them by the Treasurer of this State out of any moneys in the treasury not otherwise appropriated, but the same shall not exceed five hundred dollars in the aggregate.”

The undersigned were appointed by the Legislature the Commissioners provided for in said resolution. In accordance with the duties therein set forth, they submit the following report, containing the suggestion they deem advisable to remedy the evil complained of, together with a copy of the testimony taken before them in relation to the inquiry instituted by this resolution. The Commissioners are deeply impressed with the importance of this inquiry, and their examination and investigation prove conclusively that the fishing interests of the State of New Jersey are being greatly interfered with, to the injury of the residents and citizens of the State. The attractions of the New Jersey coast as a sea-side resort are greater than that of any other State. They have grown rapidly within the past few years, and now it is estimated that some three hundred thousand people are attracted to our coast and remain most of the summer months. If we estimate they expend but three dollars each per day on an average, it is readily seen that the amount of money brought to our State is enormous. Many of these people are attracted to our shores on account of fishing, and to enjoy the wholesome diet of fresh sea-fish. To provide for these sojourners, a large permanent population has been established along our coast; millions of dollars are invested in the improvement of lands, the building of hotels, boarding-houses and cottages, and this business will greatly increase.

Your Honorable Body cannot fail to see the importance of giving and securing protection to the great home industry of fishing for food fish, which has been the subject of the investigation of your Commissioners, the results of which, though incomplete for reasons therein stated, are respectfully submitted.

E. G. HARRISON,
W. T. BAILEY,
THOMAS E. FRENCH.

REPORT.



The Commission met at Camden, N. J., on the fourth day of May, 1888, and organized by choosing Edmund G. Harrison, Chairman, and William T. Bailey, Secretary.

The Commission made their inquiries and investigations by holding sessions at various places along the Atlantic coast, in the State of New Jersey, where fishermen and others interested reside or are engaged in their occupations.

Notices of the times and places of the meetings of the Commissioners, for the purposes above stated, were given through the newspapers and by other means, inviting all persons interested in fishing business and the protection of fishing interests to be present and give information to the Commission.

The appropriation made by the Legislature to meet the expenses of the Commission was so limited that they could not remain long in any one place or take all the testimony offered.

At the opening of these sessions the Commissioners had publicly read the resolution under which they were acting, also copies of the bills now before Congress "For the protection of fisheries along the Atlantic coast." All present were informed that the Commissioners were seeking facts in relation to the fishing interests, and the opinions of practical fishermen who are well informed on this subject. They were to make their statements voluntarily and freely, as the Commission had no authority to compel them to make statements or answer any questions. After hearing what they had to say, the Commissioners would ask such questions as they thought proper to get facts and opinions, after which any one present would be permitted to ask questions pertaining to the matter.

The Commission held their first session at Barnegat City, August 1st, 1888. This was followed by sessions at Beach Haven, Cape May City, Sewell's Point, Waretown, Atlantic City, Somers Point,

Lockport, Leeds Point, Brigantine Beach, Seabright, Port Monmouth and Asbury Park.

The information sought for by the Commission might be classed under the following heads :

1. Has the fishing interests, as relates to what is termed food fish, decreased or otherwise within the past fifteen years ?
2. If decreased, to what is the cause attributed ?
3. Are the fish called menhaden or mossbunkers food for bluefish, weakfish and other well-known food fish ?
4. If the menhaden were destroyed, what effect would it have on the bluefish, weakfish and other recognized food fish ?
5. Are the menhaden or mossbunkers esteemed by the people of any portion of the State as food fish, and to what extent are they or have they been used as an article of food for man ?
6. Where do menhaden spawn, at what time of year, and are they ever taken in nets while in a spawning condition ?
7. Do the menhaden steam vessels engaged in fishing with purse nets catch the menhaden while in a spawning condition and as they are entering the bays and inlets along the coast ?
8. Do the menhaden steam vessels catch other fish than menhaden ; if so, to what extent ?
9. Would the bill now before Congress "For the protection of fish along the Atlantic coast," if enacted into a law, benefit the people interested in fishing, as a business, and the consumers of food fish ?
10. Has the price of bluefish and other food fish been affected by menhaden purse-net fishing ?
11. Has the size of the mesh of nets used in purse-net fishing been reduced, and has the menhaden fish diminished in quantity and size ?

The Commission has heard the statements of over one hundred persons, nearly all of whom are or have recently been engaged in the fishing business, also the statements of those engaged in menhaden fishing by purse nets, and owners of fish oil and fish guano factories and workmen employed therein.

Their testimony in full is herewith submitted by the Commission.

1. To the first inquiry above mentioned, the opinions given were almost unanimous that the food-fishing interests had greatly declined during the last fifteen years. The only exception to this was the testimony of those interested in purse-net fishing, or owners or employes. This decline began soon after the steamers using purse nets

to catch menhaden fish appeared along the coast. This has made a scarcity of menhaden, and the blue and weakfish are now fewer and smaller. They can only be caught in large quantities and of good size from six to fifteen miles from the shore, whereas before the purse-net fishing by the menhaden steamers was introduced along our shore, blue and weakfish were very abundant, large in size and came near to the shore.

2. The cause of the decline is due to purse-net fishing for menhaden, which takes away our attractive food for blue and weakfish; besides, this mode of fishing frightens the fish away from the shore.

3. There was no negative to the opinion that the menhaden are a food for blue and weakfish. More than half the fishermen testified to the fact of taking the menhaden from the stomachs of the blue and weakfish, and this was done with fish caught and opened in the presence of the Commissioners.

4. The opinion is about unanimous that if the menhaden were destroyed, bluefish, weakfish and many other food fish would not come to our shore except in very limited numbers.

5. As to the menhaden or mossbunkers being claimed by a large portion of fishermen and citizens of the State as a food fish, there is no doubt. The testimony taken in Monmouth, Ocean, Atlantic and Burlington counties is conclusive on this point. Large fisheries were established and formerly well maintained, being profitable to their owners and giving employment to thousands of men in the autumn months. The menhaden were caught and sold to teamsters to peddle through the country, and to farmers coming from distant parts of the State and from Pennsylvania to procure these fish for salting for winter use. The owners of these fisheries salted and packed them in barrels and sold them in great quantities. Physicians and others testify as to their former general use in the families of the farmers, mechanics and laborers all through the country, being a wholesome and inexpensive food. This kind of fishing has been practically abandoned in New Jersey. The nets of the fishermen are no longer in use, and laborers formerly employed in this business have been compelled to move from the shore or seek other employment. The menhaden being now taken by the purse nets of the steam vessels and carried to the factories to make oil and fertilizers, the natural food of man is thus diverted from the purposes designated by the Creator for the health and sustenance of the human family.

6. The opinions of the fishermen who have given thought to this subject are that the menhaden spawn in the fresh waters of the bays, creeks and small streams along the Atlantic coast. That many of them spawn in the Barnegat bay and its tributaries, there can be no doubt, as the smallness of these fish seen in these waters is an evidence that they have been spawned there.

7. All the testimony indicates that menhaden are most plentiful in the fall of the year, as they migrate south. The older ones being at this time filled with spawn, they are in this condition when they attempt to enter the inlets and bays of our coasts, but are caught up by the purse nets.

8. There is no doubt that many food fish are taken up with the menhaden in purse nets. Much testimony has been given by those who have formerly worked on the purse-net vessels, and those who have been on board of them, which proves that fact. While it may not be profitable to catch blue, weak and other food fish for factory purposes, they are nevertheless caught in considerable quantities and thus used.

9. The fishermen unanimously agree that the bills now before Congress would, if enacted into a law, be of great advantage to the fishing interests, and unless some such protection is given, the fishing interests for food fish are in danger of being destroyed.

10. Previous to purse-net fishing, bluefish were plenty and sold from three to five cents per pound; now they are scarce and sell from seven to ten cents per pound; sometimes they cannot be had for any price.

11. The testimony of those who were working and had worked in the menhaden steam purse-net vessels was that for a few years past the size of the mesh of the nets used by them had been reduced from three inches to one and one-fourth inches, stretch measure. This was done in order to catch small fish, as large menhaden were getting scarcer every year. The published statements of these fishing companies show that the numbers of fish caught have greatly diminished since 1884, and less oil is obtained from them.

The Commission find the complaints referred to in the joint resolution are well founded. From the testimony of those engaged in fishing for and working in the fish-oil and fish-guano factories, as well as the reports of the United States Oil and Guano Associations, the Commission obtained the following facts:

About twenty years ago sailing vessels were employed, which used purse nets for the purpose of catching the fish now called menhaden, formerly mossbunkers, for oil and guano, but it was found that steam vessels were of more advantage, as they could be used in rough or calm weather and could be better managed in surrounding the school of fish. The appliances for fishing could also be worked by steam. Some of the nets are twelve hundred feet long and one hundred feet deep; with these the schools of fish are surrounded. The nets are then drawn together at the bottom, so as to prevent the escape of fish, and then hauled into the vessels by steam power. Many tons are taken at a time. This industry is a large one, and is backed by enormous capital. It extends along the coast from Maine to Florida, and gives employment to many persons. Yet it has been found to interfere greatly with the food-fishing interests, where more men are employed, and the supply of food fish is greatly decreased. It is clear that public policy demands that this mode of fishing be prohibited altogether, or put under such restrictions as will prevent the catching of menhaden while in a spawning condition. The testimony of practical men, engaged a lifetime in the fishing business, is fully clear and conclusive on these points. As the State of New Jersey can only enact and enforce laws relating to fishing in the waters within her own jurisdiction, which does not extend beyond low-water mark of the ocean, we recommend an amendment to the law entitled "An act to prohibit fishing by steam and other vessels with shirred or purse seines in any of the waters within the jurisdiction of the State of New Jersey," passed April 8th, 1884.

The law should be made effective by providing for the appointment of proper persons to attend to the enforcement of the law. They also recommend that the Senators and Representatives from New Jersey be instructed to secure the passage of the law by Congress entitled a bill "For the protection of fisheries along the Atlantic coast," introduced in the Senate by Mr. Quay, and in the House by Mr. McAdoo. In the year 1884 the first bill for the protection of fisheries along the Atlantic coast was introduced in the United States Senate by the Hon. William J. Sewell, Senator from this State. The Senate Committee on Fisheries took a vast amount of testimony in relation to the fishing interests. In their report to the Senate they say they are satisfied that the capture of fish by steam vessels and appliances fitted for that purpose, within three miles from the Atlantic coast, is a serious evil.

They further say the variety and many interests of food fishing on the Atlantic coast, in consequence of the multiplication of seaside resorts thereon, and the increasing demand for fish for food, require a kindred protection to that so generously provided by the Legislatures of the States in respect to inland waters. The theory of such legislation has been, so far as practicable, to protect fish from capture during the season of spawning. Upon the facts and statements aforesaid, they gave their opinions as follows :

“ 1. The use of purse and pound nets, fyke or weir in the waters of the Atlantic outside of low-water mark should be absolutely prohibited within three miles of the shore, prior to the first day of June in each year, south of the line east of the south capes of the Chesapeake bay, and prior to July first north of that line, with suitable penalties for any violations of the law in this respect.

“ 2. That the use of a mesh in such nets of less than one and a half inches in size, bar measure, so as to prevent the taking of young and immature fish.”

While your Commission arrive at the same conclusion as the United States Senate Committee, that the capture of fish by steam vessels and appliances within three miles of the Atlantic coast is a serious evil, yet, with all respect to the opinions of that committee, they do not think the remedy proposed by that committee will lessen the evil. They proposed to limit the time for taking fish by steam vessels and appliances by preventing the catching of fish previous to June and July. This is a time when so few are caught that it would make but little difference in the result. The actual time of spawning is uncertain, but it is certain that the fish are filled with spawn as they migrate south in the fall season, and go to our inlets to enter our bays and fresh water streams for the purpose of spawning. Your Commission therefore recommend that if a law cannot be obtained to absolutely prohibit this mode of fishing within two or three miles of the shore at all times, then the law should be made to prohibit the capture of these fish between the first of September and first of December. Your Commission also recommend that the size of the mesh should not be less than three inches, stretched measure, for fishing at other seasons of the year, in order to prevent the catching of the small, immature fish.

The Commissioners regret that the small sum of five hundred dollars appropriated to enable them to make the inquiry mentioned in

the joint resolution, became exhausted before they could complete their work. The fishermen along Barnegat bay, and as far north as Long Branch, would like to have been heard before the Commission, to show the cause of the destruction of the fishing interests on that part of the coast, but the sessions of the Commission could not be held there for the reason stated.

By the terms of the joint resolution the Commissioners were to report to your Honorable Body, and also to present the result of the investigation and examination to Congress at the present session. Your Commission is informed by those having charge of the bill now before Congress that the committee to whom the same has been referred will not consider the subject further during this session. We therefore suggest that this Commission be continued, or some other means be adopted to present the testimony and facts prepared by this Commission and this report, to Congress, with a view of aiding the passage of the bill now before Congress, above referred to, as the resolution creating the Commission contemplated.

E. G. HARRISON,
W. T. BAILEY,
THOMAS E. FRENCH.

The bill has been passed by the House of Representatives and is now in the hands of the Senate. The bill is intended to provide for the better regulation of the trade in slaves and to prevent the same from being carried on in any part of the United States. It is the duty of the Senate to consider the bill and to report thereon to the House. The bill is a measure of great importance and it is the duty of the Senate to give it the most careful consideration. It is the duty of the Senate to report to the House the result of its deliberations on the bill. The bill is a measure of great importance and it is the duty of the Senate to give it the most careful consideration. It is the duty of the Senate to report to the House the result of its deliberations on the bill.

THOMAS T. BRIDGES
W. T. BRIDGES
THOMAS T. BRIDGES

TESTIMONY.

—o—

BARNEGAT CITY, N. J.

Edwin A. Falkinburg, aged forty, residing at Barnegat City, sworn—

Always lived along the bay's shore ; have fished for a living since I was a man ; the fishing does not compare with what it used to be, in number or in size.

Q. What do you think the cause ?

A. The scarcity of food for the fish.

Q. What is the food for the bluefish ?

A. Principally menhaden, which I have found inside of bluefish, and have seen them feed on them.

Q. Where do you think the menhaden spawn ?

A. I think they spawn in our creeks or around the bay, because I see them in the spring so small that they could not have come far.

Q. Do you have any reason why the bluefish are more plentiful this year ?

A. Yes, sir ; I think it is because the steamers have not been around so much this spring as usual ; I have not seen any steamers ; I think if the steamers did not fish within three miles of shore the food fish would soon become as plentiful as formerly.

EDWIN A. FALKINBURG.

August 1st, 1888.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Samuel B. Conkling, residing at Cedar Run, aged twenty-nine, sworn—

Have always followed fishing for a living ever since I was ten years old.

Q. Has the bluefish increased or diminished in the last few years?

A. Diminished; I think it is because the steamers take the moss-bunkers away, which are the food of the bluefish; I know they feed on them, because I have seen them in the stomachs of the bluefish; the bluefish cannot be found if there are no bunkers about; I believe they spawn in the brackish water in the creeks about the bay; the bluefish are more plentiful this summer than for a few years past.

SAML. B. CONKLING.

August 1st, 1888.

Sworn and subscribed before me.

E. G. HARRISON,

Notary Public.

James T. Mills, aged thirty-seven years, resides at Barnegat, N. J., sworn—

Q. How long have you resided there?

A. All my lifetime.

Q. What is your occupation?

A. During summer, fishing, and during winter in a life-saving station; have been a fisherman ever since I was old enough.

Q. What kinds of fish do you generally fish for?

A. All kinds.

Q. Have you noticed any decline in the fishing lately?

A. Yes; in bluefish considerable.

Q. What do you think the cause?

A. I have thought it was caused largely by the menhaden fishing.

Q. In what way do they interfere?

A. By taking the food of the bluefish away from them.

Q. Have you ever been on board when they were making a haul?

A. Yes.

Q. Did they take any fish in the net beside the menhaden?

A. Yes; I have seen several hundred weakfish taken in a haul

with the menhaden ; they did not separate them, but dumped them all in the hold.

Q. Has your business as a fisherman been injured by the scarcity of fish ?

A. Yes.

Q. Do you believe the menhaden fishing has been the cause ?

A. Yes.

Q. Has there been as much menhaden-fishing at the mouth of Barnegat Inlet this summer as for the past few years ?

A. I have not seen as many.

JAMES T. MILLS.

August 1st, 1888.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Mahlon O. Ridgway, aged fifty-three, residing at Barnegat Village, sworn—

Q. How long have you resided there ?

A. Always.

Q. How long have you been a fisherman ?

A. Always.

Q. Have you fished with a net, or line ?

A. Both, and caught all kinds.

Q. Has bluefishing declined lately ?

A. Yes ; very much since the menhaden steamers came around the inlet.

Q. What was the price of bluefish ten or fifteen years ago ?

A. Two and two and a half cents per pound.

Q. What is the price now ?

A. About seven cents per pound ; but I could make four times as much then as now.

Q. Have you seen them make a haul ?

A. Yes.

Q. Do they ever take any food fish ?

A. Yes ; fish of all kinds, and throw them all in the hold.

M. O. RIDGWAY.

August 1st, 1888.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

STATE OF NEW JERSEY, OCEAN COUNTY, ss.:

Albert M. Kinsey, duly sworn, says he is forty-seven years old ; residence, Barnegat City ; fisherman ; have fished in Barnegat bay for nearly twenty-one years, both inside and outside ; have made a living by sailing fishing parties ; before we had any purse-net fishing we had more fish than could be used, and they were thrown away ; I have known instances where they were thrown on the shore by the hundreds, and we had to go down the next day and throw them overboard on account of the stench ; since the menhaden fishermen have fished off here the fish of all kinds, and particularly the bluefish, have been very scarce, with the exception of the present season ; where we could count twenty fishing steamers of the menhaden fishing company at one time within sight, now there is scarcely one a day, and bluefish are more numerous than for five years, and weakfish and menhaden ; when the menhaden steamers were numerous off the inlet, the fish of all kinds were scarce all up through the bay, as they were stopped from coming in the inlet, which extends for thirty-five miles along the coast and about five miles wide ; of the fourteen hundred inhabitants of Barnegat village almost all of them are dependent on the fishing industry for their livelihood ; that Waretown, a neighboring village, contains about five hundred people, who likewise depend upon the bay ; this also is true of Forked River, Toms River, Cedar Creek and Bayville, which contain, in the aggregate, about four thousand inhabitants ; also Silverton and Burrsville, which contain about five hundred inhabitants ; also south of Barnegat village are the towns of Manahawkin, of about twelve hundred inhabitants, Cedar Run, four hundred, Staffordville, fifty, West Creek, about six hundred, Parkertown and vicinity, about two hundred ; all of the families in the above region are more or less affected by the diminution of the fishing for food fish ; have been in a small boat alongside of steamers when they were loading the fish from the net, and have seen numbers of bluefish

and other good fish scooped up with the menhaden and dumped into the hold of the steamer.

A. M. KINSEY.

August 1st, 1888.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Aaron W. Pharo, aged fifty; residence, West Creek, sworn—

Q. What is your business?

A. I have been a fisherman all my life on Tuckerton bay and Barnegat bay.

Q. Is your business as good as it used to be five or six years ago?

A. No, sir; not half.

Q. How do you account for the change?

A. We have never had the bluefishing so good since the menhaden steamers began to catch the menhaden.

Q. What do you think the cause to be?

A. Because the food has been destroyed.

Q. How do you know that the menhaden is the food for bluefish?

A. Because I have, when cleaning them, found menhaden in their stomachs, and nothing else; I have seen them with other fish, but always menhaden if the bluefish are large, and when fishing they have vomited them often from their stomachs when landed in the boat.

Q. Has your livelihood as a fisherman been interfered with by the scarcity?

A. Yes, it has, very largely.

A. W. PHARO.

August 1st, 1888.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Enoch C. Boice, of Barnegat City, proprietor of Hotel Oceanic, aged forty-four, says—

That he has always been financially interested in fishing; was born at Absecon and lived there until I was twenty-five years old, and was engaged in farming and fishing; for the last six years I have been in Barnegat City; I have frequently seen the menhaden being

followed up by the bluefish and devouring them, and have seen them vomit up menhaden when they have been landed.

Q. Is fishing for food fish as good now as it has been for years past, along the bays on the coast?

A. I can see that the bluefishing is not to be compared with that of years past.

Q. What is your theory as to the cause or this falling off?

A. I attribute it entirely to the scarcity of the menhaden.

Q. How do you account for the scarcity of the menhaden?

A. I think it is caused entirely by the steamers with the purse nets around the inlet; I saw twenty-nine steamers fishing at one time within a distance of four miles up and down the coast, the farthest of them not three miles from shore, and the nearest so close to the shore that the steamer would have a line run to the net in the shallow water to haul the net out so the steamer could come alongside to load them.

Q. Have you heard much complaint from the fishermen as to the falling off of their business?

A. It is the general complaint among the fishermen and yachtsmen who sail parties, that their business is almost broken up; everybody that I know of engaged in the business of fishing complains of the diminished supply.

Q. As a hotel man, is it your observation that sporting parties are fewer because of the scarcity of the fishing?

A. Yes, seriously so; the bluefishing has been better this season, so far, than for the four years previous.

Q. How do you account for the change?

A. The change is caused by the steamers not fishing for menhaden off the inlet this year; I think for no other reason; I believe that if they were kept from fishing within three miles of the coast that the fishing would be good in five years as formerly.

ENOCH C. BOICE.

August 1st, 1888.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Ephraim W. Potter, of Barnegat City, aged thirty-eight—
Have lived at Barnegat City for the past two years, where I am

assistant keeper of the light-house ; previous to that I have always lived at Bayville, where I fished for a living ; my father was one of the principal fishermen of the bay, and my four brothers are now following the same pursuit.

Q. Is what is called menhaden a food for bluefish ?

A. I say that it is, and that I don't remember that I ever caught any large bluefish of three pounds or over that had no menhaden inside of them ; the menhaden is undoubtedly the main food for large bluefish ; out of a catch of, say one thousand pounds, when cleaned, would be taken about two hundred pounds of menhaden from inside their stomachs ; I have had several such experiences ; I frequently have taken out of the stomach of a large bluefish as high as six or seven menhaden ; it is a very common occurrence to clean three or four menhaden from the stomach of the bluefish.

Q. How do you account for the present scarcity of food fish ?

A. Fishermen in general lay it to the menhaden steamers along our coast, and particularly around Barnegat inlet ; I never saw any scarcity of food fish until the menhaden steamers began fishing along our coast ; I think it would benefit the fishing very much if the steamers were compelled to keep three miles from shore when fishing.

EPHRAIM W. POTTER.

August 1st, 1888.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Joel H. Ridgway, resides at Barnegat City, aged fifty-three, sworn—

Have been a fisherman all my lifetime ; have caught fish for a living before I went into the life-saving station in the winter ; now I only fish in the summer time.

Q. Has the bluefishing fallen off in the last fifteen years ?

A. Yes, there are not one quarter as many now.

Q. What was the price about fifteen years ago ?

A. About \$5 a hundred in the winter time and hardly any sale in the summer, they were so plenty ; now, in summer time we can

only get five cents a pound, and can't get enough in the winter to make it worth while to sell them.

Q. What is the cause of the scarcity now at Barnegat inlet ?

A. I attribute it to the purse nets of the steamers catching the mossbunkers, which are the food of the bluefish and also the striped bass, or rock, and large weakfish.

Q. How do you know they feed on the menhaden ?

A. I have taken them out of the stomach of them ; sometimes the menhaden inside the large fish are swallowed whole.

Q. Have you any opinion as to where the menhaden spawn ?

A. Yes, for the reason that I have seen large numbers of small bunkers, about the size of your fingers, in the bay ; during September and October our creeks will be full of them ; in April and May the mossbunkers have the spawn in them and spawn then ; after spawning they are poor and have very little oil in them, but in the fall they are fat.

Q. Is the bluefishing this summer any better than for the last few years ?

A. As far as my experience goes, it is very much better.

Q. Can you account for it ?

A. I cannot account for it in any way except that there has been scarcely any steamers here so far this summer.

Q. How many steamers have you seen at one time fishing off the inlet ?

A. Myself and crew have counted as high as eighteen fishing at one time.

JOEL H. RIDGWAY.

August 1st, 1888.

Sworn and subscribed before me,

E. G. HARRISON,
Notary Public.

George W. Morse, resides at Waretown, aged thirty-nine, sworn—
Have always lived along the bay ; my business is fishing.

Q. You fish for food fish ?

A. Yes.

Q. Do you see any decline in fishing ?

A. Yes, a great decline in bluefish ; several years ago we used to catch so many we could not use them.

Q. What do you think the reason?

A. I think the menhaden steamers fishing outside the inlet has driven them away by taking the food away; I believe the large fish eat the mossbunkers; I have caught bluefish and found the bunkers inside them.

Q. Has the scarcity of fish hurt your business any?

A. Yes, it has, and has hurt the business of my neighbors, and I don't doubt but what the steamers do it.

G. W. MORSE.

August 1st, 1888.

Sworn and subscribed before me.

E. G. HARISON,

Notary Public.

Isaac P. Peckworth, Jr., resides at Barnegat City, aged thirty-two, sworn—

Was born at Manahawkin and have always lived along the bay shore, and have followed fishing for a living.

Q. Has the fishing for bluefish increased or declined in late years?

A. It has declined very much.

Q. What do you think the reason?

A. The menhaden are taken up by the steamers and there isn't enough food now.

Q. What reason do you have for thinking the bluefish feed on the mossbunkers?

A. I see them feed on them lots of times.

Q. Have you ever been on a steamer when they were making a haul?

A. Yes.

Q. What do they bring up?

A. Both menhaden and bluefish, and put them in the hold; I once brought off about sixty bluefish that the captain of the steamer gave me out of a haul.

Q. Did you ever see menhaden chased ashore?

A. Yes, sir ; I have seen the bluefish chase them ashore in large numbers.

I. P. PECKWORTH, JR.

August 1st, 1888.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

BEACH HAVEN, N. J., August 10th, 1888.

Jesse Lamson, residence, Beach Haven, aged fifty-three, occupation, fisherman, sworn—

Have fished for a living about eleven years in this vicinity ; a few years ago the bluefish were plenty, and we could catch all we wanted ; their food is the mossbunkers.

Q. Why do you think the fish feed on the menhaden ?

A. Have seen them chase the bankers, and have noticed that a large run of bankers is always followed by the bluefish, and have seen them bite them.

Q. Have you ever seen the menhaden steamers fish ?

A. Yes.

Q. Do you know that they catch anything but menhaden ?

A. Yes ; I have had them give me large quantities from their boats ; I lay the decline in fishing to the menhaden steamers, and have seen them close to shore fishing.

Q. Did you notice that the bluefish were plenty when the menhaden were plenty ?

A. Yes, and when they became scarce the bluefish have become scarce.

JESSEE LAMSON.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

A. *Cramner*, residence, Beach Haven, aged fifty-two, occupation, fisherman for over thirty years along the New Jersey coast and for ten in this vicinity, sworn—

Q. Have you noticed a decrease in food fish ?

A. Yes, sir, it has greatly in the last twenty years, on account of

the purse-net fishing ; the bluefish feed on mossbunkers, I think, because they prefer menhaden to any other fish ; if there wasn't any menhaden the bluefish would not come ; if there was no menhaden there would be no bluefish ; the menhaden spawn in our creeks and the bay ; have seen them about the size of my thumb ; they can be told by the size of their heads ; their heads are about one-half the whole fish ; they must spawn in the bay ; have seen the steamers take the menhaden in large quantities as they go up the bay ; if they took all the mossbunkers I think we would have no fishing ; I think they spawn in August ; they fatten up in September ; we would have plenty of food fish along the coast if they were stopped fishing within two miles of the coast ; fishing began to decline about fifteen years ago ; it has affected weak, rock, sheepshead, perch, sea bass.

Q. Is there any other cause, do you think ?

A. No ; the purse-net fishing inside the bay sweep over the sheepshead grounds and hurt and stop it.

A. CRAMNER.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Joseph Wilson, sworn—

I spent the summers of 1871 and 1872 at Atlantic City, and was fishing for bluefish mostly, and on opening the bluefish would find fish in their stomachs, and mostly menhaden.

JOSEPH WILSON.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Robert Engle, residence, Beach Haven, business, hotel-keeper since 1874, affirmed—

The bluefish has decreased during that time, and I think because the menhaden has been taken away by the steamers ; have seen the

bluefish feed on the menhaden ; the fishing with nets interferes with the fishing in the bay, and I think it should be restricted.

ROBERT B. ENGLE.

Affirmed and subscribed before me.

E. G. HARRISON,
Notary Public.

Isaac Cramner, residence, Manahawkin, aged forty-nine, business, fishing and boating, sworn—

Have noticed a change in fishing in the last few years ; I think haul and seine nets are the cause ; the main food for bluefish is menhaden ; I think the purse-net fishing hurts the fishing for blue and sheepshead.

ISAAC CRAMNER.

E. G. HARRISON,
Notary Public.

Samuel Ashurst, M. D., residence, Philadelphia and Beach Haven, sworn—

Have been at Beach Haven in the summer since 1861 ; then the sheepshead were plentiful, and then have seen one hundred boats fishing at one time for them ; I think it is partly due to the haul and seine nets that they have disappeared ; the fishing for menhaden has diminished the food for other fish, and thus they are scarcer ; have seen the bluefish vomit pieces of menhaden ; would recommend, for the interest of the large number of people, that the net-fishing be confined to very narrow limits ; to give up net-fishing altogether.

SAMUEL ASHURST.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Israel Gaskill, aged fifty-five, Beach Haven, sworn—

Have been a fisherman for the last three summers steady, for all kinds of food fish ; the fishing is not so good as formerly, because of the haul-in fishing in the bay ; it has hurt sheepsheading most ;

what it has not caught it scares away ; would recommend a law to stop net-fishing ; have not fished for bluefish for several years ; there are none now ; it is on account of purse-net fishing ; have been in that business ; the menhaden is undoubtedly the food of bluefish ; we have caught other kinds when making a haul.

His
ISRAEL X GASKILL.
mark.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Clarence Seaman, of West Creek, aged twenty-nine, fisherman, sworn—

Have been a fisherman since I was large enough to sail a boat ; have fished for profit instead of pleasure ; the fishing has decreased greatly, I think, because they are robbed of the food ; I was aboard the "Alert," one of the fishing steamers, this afternoon, and when talking with the engineer he told me that they took about six thousand blue and weakfish in one load last summer ; the decline has hurt my business ; I have not caught a bluefish for five years ; have seen the small fish, about two to three inches long, up the creek in school ; they spawn in salt water along the creeks ; they were too small to come in from the ocean.

CLARENCE A. SEAMAN.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Albert S. Cranmer, of West Creek, aged thirty-seven, occupation, fisherman, sworn—

Have been a fisherman ever since I was a boy ; fishing for food fish has declined, and on account of the menhaden fishing ; I think the bankers the natural food of the bluefish ; about fifteen years ago I was employed on one of the steamers ; their nets are large, heavy, about two hundred and fifty fathoms and upwards ; they circle around a school ; they get to windward with two boats and spread the net around them ; they clew the net at the bottom ; we always found food fish of all kinds in the net ; we sometimes picked them

out, but generally they were put in the hold with the bankers and taken to the factory; the mode of fishing frightens the bluefish away; have seen them take six or seven hundred in one haul—about ten or twelve tons; we always took some food fish.

A. S. CRANMER.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

William H. Stevens, Beach Haven, aged thirty-two, fisherman, sworn—

Have fished all my life in this vicinity; the food fishing has declined in the last ten years because the menhaden steamers take the bankers away, which the bluefish feed on; the bluefish always follow the menhaden, and never come in schools except they are following bankers; I think if the menhaden were all fished out it would destroy the fishing industry; have seen lots of menhaden in the stomachs of bluefish when I cut them up; you can tell them because of their large heads; the sheepshead fishing is injured because of the net fishing in the bay—by the seine fishing it also causes a falling off in other fishing; I think my business is much injured by both kinds of net fishing; I think if Congress were to pass a law stopping purse-net fishing within two or three miles of shore it would improve the fishing.

WM. H. STEVENS.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Samuel R. Shourds, aged thirty, residence, Tuckerton, sworn—

Business, fishing in summer time in Tuckerton bay, for sheepshead mostly; they are not so plenty as formerly; I think the seine net fishing scares and drives the sheepshead away; know very little about bluefish; I would like the bay net fishing stopped; I think there are not over twenty net fishermen in Tuckerton bay; there are about one hundred and fifty line fishermen, whose business is

hurt by the nets; have known of eighty-three sheepshead to be caught in two hauls on one ground about two weeks ago; since then I have fished on that ground almost every day, and there has been but three or four felt there since; Levi French is the Fish Warden here; we have notified him of the illegal fishing, but he would do nothing; Ephraim Berry was the owner of one of the nets fishing.

SAMUEL R. SHROUDS.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Samuel R. Copertnwaite, residence, Beach Haven, aged fifty-one, sworn—

Have been a fisherman for over fifteen years; during that time the bluefish have gone; we caught fifteen hundred weight in three days once, fourteen years ago; have seen the bluefish run the bankers on the flats in large numbers; the fishing is affected by the bay net-fishing; I think if the mossbankers were all gone the bluefish would disappear because of the scarcity of fish; and if the steamers were kept from fishing within two or three miles of the coast, the fishing would improve.

S. R. COPERTHWAITE.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

ASBURY PARK, N. J., August 17th, 1888.

William Slover, aged forty-two, residence, Asbury Park, sworn—

Have been a fisherman for eleven years in this vicinity; during that time there has been a wonderful decline in fishing, and, in my opinion, not only by taking the menhaden, but also by disturbing them; they take all kinds of fish; but principally I think the menhaden is the food of the bluefish; I have frequently found mossbunkers when I have opened bluefish; the mossbunkers, I think, spawn in the little bays; I have seen them there small; the mode of fishing for the menhaden scares the blue and other food fish from

the shore ; I have been on the steamers when they hauled ; I have seen them take large numbers of food fish ; I bought three hundred weight off one of them once ; I think a two-mile law would cause the fishing to improve, as the fish follow the shore ; I have caught weakfish and codfish that had mossbunkers in them ; have often found two or three in a weakfish ; the demand here for mossbunkers, to be used here as food fish, is greater than the supply ; we cannot get them fast enough ; have never seen the time we could ; when I was a boy I peddled them ; they are caught so often that they do not get as large as they used to.

W. SLOVER.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

D. H. Green, aged forty-three, residence, Ocean Park, business for six years fishing for buefish, bass and plaice, sworn—

In that time it has decreased ; my theory is because the pursers have driven them away by taking the bankers, the food of the bluefish and weakfish ; there is a constant decrease every year ; we catch weak, blue and codfish, and generally found some menhaden in their stomachs when we opened them ; the menhaden travel close to the beach ; I have eaten menhaden ; I think they should be classed as a food fish.

D. H. GREEN.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Frank Morton, aged fifty-two, residence, Como, sworn—

Used to follow fishing as a living for a number of years ; I had to give it up about ten years ago, and had to go to work by the day ; they got so scarce I had to stop ; food fish has diminished in late years very much ; the mossbunkers have been driven away ; I have cleaned thousands of bluefish and weakfish, and very often found bankers in the stomachs ; I used to fish for banksrs ; I consider them a good fish, and better than mackeral, when fat ; some people prefer

them to bluefish ; the farmers used to bring their wagons for loads ; they never come now ; when I fish with a net I scare away what I don't catch.

FRANK MORTON.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

William F. White, aged twenty-three, residence, Ocean Park, occupation, fisherman, sworn—

Have been a fisherman ever since I was seven years old ; ten years ago I could any day catch from one to four hundred pounds ; now we could not catch any ; bluefish and weakfish feed on bankers ; the bankers are now broke up by the pursers ; the pursers are the menhaden steamers ; they put the purse nets on two boats, they go around a school, they draw it together at the top and bottom ; once I got a hundred weight of bass for bait off a steamer ; I have seen them load a steamer ; have seen in a haul butterfish, bankers, plaice, bass, blue, weak and all kinds ; I once worked on a steamer ; the bluefish when they are running a school of bankers and you put a net ahead of the school, they will stay there till caught ; I have seen as high as two hundred or three hundred weight of food fish (weak and blue) taken in a haul ; I have always been able to get all the bait I wanted when I tried to buy it off a steamer.

WILLIAM F. ^{His}X WHITE.
mark.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

CAPA MAY, N. J., August 23d, 1888.

Fosiah H. Sooy, sworn—

I am seventy-eight yearsold and live at Cape May, and have been a fisherman, winter and summer, since I was twelve years old, mostly inside, in Atlantic county.

Q. Are you familiar with menhaden fishing ?

A. Yes, I am familiar with it ; their purse nets are several hundred fathoms long, and deep ; they are an inch mesh usually—sometimes larger ; the menhaden fishing, from my experience, has been a

great detriment of food-fishing ; before they came there were schools of acres and acres of menhaden, and then you could go anywhere and catch all the fish you wanted ; the larger fish follow the bunkers and eat them ; bluefish are sometimes called snapping mackerel ; they feed on the bunkers ; a school of menhaden is generally followed by the larger fish ; when the purse nets are thrown out they gather up all kinds of fish together ; there have not been so many steamers around this summer ; they spawn in the bay's brack-water ; seen them about the size of your finger ; am acquainted with the haul nets in bay ; they catch rock, drum, and all kinds ; never gill with set nets here, because the bay is too shoal ; if a net is hauled over a good fishing ground once, you needn't try with a line there for some time ; that is the same all over ; the nets interfere much with the line fishing, and ruin it ; I think if net fishing of all kinds was stopped within three or two miles of land it would very much help the fishing of all kinds by allowing the fish to get into the bay to spawn ; I fish mostly for rock, perch, weak, hake ; ten or fifteen years ago food fishing was more profitable ; I think menhaden, if properly fixed, would be good food fish in certain seasons ; the bluefish and snapping mackerel feed mostly on bunkers, and if the bunkers are scarce the bluefish can't be found.

JOSEPH H. SOOY.

Sworn and subscribed before me,

E. G. HARRISON,
Notary Public.

Frederick Woolman, sworn—

Am forty-five years old ; reside at Cape May ; have been a fisherman here for ten years ; during that time fishing for food fish has diminished ; I have noticed that since the menhaden steamers came around the bluefish have been getting scarcer all the time ; they use up the food of the bluefish, which is menhaden ; I have found pieces of menhaden in the stomachs of the bluefish ; the menhaden has decreased very much because they are caught up ; have been on steamers to get bait ; the menhaden this summer have been very small ; sea-bass feed on the bunkers ; bunkers is the best bait we use for bass ; the seine net fishing hurts the food fishing in the bay ; the fish are scared away by the nets ; have seen lots of small bunkers in the bay, two or three inches long ; I think if the steamers were stopped from fishing within two or three miles of the shore it would

help the fishing, as they fish right off the inlets and keep them from coming in the bays to spawn.

FRED. WOOLMAN.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Jacob W. Stiles, of Cape May, aged sixty-three years, business, fisherman, sworn—

Have been in the business for fourteen years; during that time it has declined materially, so much so that it has in a manner made it worthless; I have but one opinion on the decline; for the last six or eight years the steamers have loaded two to five steamers on a tide; since that time the bluefishing has been on the decline; there is no menhaden here to bring them this summer; I have formerly seen the menhaden solid almost for miles; formerly when I went out to the banks every day, for one to five miles out on a calm day, I would sail through the schools of menhaden almost solid; I have caught bluefish filled with menhaden—sticking out of their mouths; they were so full of menhaden that they could not swallow any more; have seen a snapping mackerel bite a menhaden in half, and then turn around and swallow the other half.

J. W. STILES.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Andrew J. Bohn, aged thirty-eight, residence, Cape May, occupation, fisherman, sworn—

I have been a fisherman ever since I could walk; I have noticed a great decrease in fishing since the menhaden steamers came; the steamers take all kinds of fish; last year it was difficult to find fish and the steamers were numerous; this year there are no steamers and the fish are very plenty; I fish with a net in the spring; fish with an inch to an inch-and-a-quarter mesh; there are about one hundred people depend on the net-fishing for a living.

A. J. BOHN,

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Senator John E. Reyburn, aged forty-two, residence, Philadelphia, profession, lawyer, sworn—

Am at Cape May about four months every year for the last twenty years ; there has been a rapid decrease on account of the nets, both purse and seine ; the purse nets have been disastrous to fishing ; they destroy all sorts of food for the other fish ; have frequently seen schools of menhaden followed by bluefish and eat them ; have caught the bluefish and have found menhaden inside them partly digested ; they have spewed them up when caught ; formerly we could often catch eighty or ninety fine snapping mackerel in a day ; I would suggest that the fishing with seines be stopped absolutely and indefinitely ; I think it would be of advantage to the mass of people ; the common weal should be protected from the depredations of the menhaden steamers ; think the three-mile law would be a benefit ; have seen them so close to shore you could throw a stone on them ; the constant disturbance of fish by the nets has caused the decrease of all kinds of fish ; the hauling of a net over any ground destroys all kinds of food for the fish besides the menhaden and animal food ; I would have something similar to the West Jersey Game Protective Society, and have a secret detective employed to ferret out the wrongs ; there are not over twenty-five men employed around here with seines, and they would have much better employment sailing parties than they make now ; when the fishing increased the number of sporting men would be increased tenfold that come here to fish ; I think if seines must be used the length should be regulated and they should not be allowed to set across the small sounds ; they scare them away and for several days we cannot catch any where a net has been.

JOHN E. REYBURN,

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Albert Chambers, aged fifty, residence, Cape May, sworn—

Have been a fisherman for thirty years here ; I am in a station in winter ; the fishing has decreased, I think, because the menhaden are caught ; there is nothing for the other fish to feed on when they are gone ; I have seen the menhaden inside of the drum, as large as three-quarters of a pound, both whole and in parts, sometimes partly

digested; once saw two whole menhaden inside one drum; have frequently been on the steamers when they fished, and have seen large quantities of food fish among them; they have given me quantities of blue and drum from a catch; have fished with nets inside the bay for all kinds; I would not be with a line the next day after I had swept a ground with a net; the nets are about an inch mesh; I am opposed to fishing with anything smaller than a one-and-a-half-inch mesh; I don't fish with less than an inch mesh; would be better for fishing in general if the nets were two-inch mesh; I think the purse nets are an inch on the ends and an inch and a quarter in the middle; I think if all the menhaden were fished up that the good fish would also disappear; always find plenty of drum following a school of menhaden; I have caught as high as two in a day; last fall there were only three drum caught by all the men in our station; I think the purse nets scare the good fish away; most any net will scare fish; there are plenty of small menhaden in the bay now.

ROBERT CHAMBERS.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Capt. Augustus Sooy, aged fifty, residence Cold Spring, sworn—

I am captain of the Cold Spring Life Saving Station in winter and fish in summer; have been in fishing business for about eighteen years; during that time the food fish has decreased, I think, because the purse nets catch the menhaden up, and also take other fish; the red drumfish follow the menhaden and feed on them; I don't think the net-fishing in the bay any good to the fishing, and is a great injury; they scare what they don't use; I think the fishing would be so improved if net-fishing was stopped that the men now in the business would make as much money with a line; I have seen a steamer loaded with one haul; have known the bunkers to be used for food pickled, &c.; I have eaten them.

AUGUSTUS SOOY.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Alexis M. Schellinger, aged forty-four, residence, Cape May City, sworn—

Have been fisherman ever since I was a boy ; during the last few years the fishing has diminished ; ten or twelve years ago could see acres of menhaden ; now the bankers are scarce, and there are no bluefish ; the drumfish feed on them ; have seen bankers inside of drum often ; am not interested in any nets now ; have formerly been ; it interferes with the line fishing ; would be just as apt to catch fish the next day after a haul had hauled over a ground ; fish spawn from about May 15th to September 1st, and no nets should be used then ; have seen large quantities of fish thrown away from nets ; there are six or eight men who fish nets in this locality ; I think a two-mile menhaden law would be a good thing and help tne fishing, even if during July and August ; the bluefish always follow the menhaden.

ALEXIS M. SCHELLINGER.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Thomas S. Reed, aged sixty-six, residence, Philadelphia in the winter, here in summer, sworn—

Have been here for fourteen summers ; during that time fishing has decreased ; think because of the menhaden steamers ; have opened fish and found menhaden inside their stomachs ; formerly we would bring in several hundred weight ; I think they spawn around here ; I think the bay net-fishing hurts the fishing much ; ten or twelve years ago our waters were alive with menhaden ; now there are none ; I think they spawn here and go to the warmer waters for the winter ; I think the laws on net-fishing should be changed and the Wardens made more numerous and effective ; the mesh should be regulated, and then not to fish until about July 15th ; I think a three-mile law would be beneficial to the fishing ; I think if net fishing were stopped for two or three years they would be increased ; I don't think the Warden has made three trips this summer ; I have been out almost every day and have never seen him on the water ; I think a stranger should be the Fish Warden, instead of a man from the locality.

THOMAS S. REED.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Morris Cresse, aged fifty, residing at Cape May City, sworn—

Have fished for the last thirty years ; during that time it has decreased ; the price is as high again now as it was fifteen years ago ; I think the decrease is because of the menhaden steamers ; I used to run a schooner, and we used to catch from two hundred to eight hundred pounds a day ; now we can't catch any bluefish, called here snapping mackerel ; the mackerel prey on the menhaden, and when they are gone the fish go ; I know they feed on the menhaden ; have been on the steamers when they fished ; am satisfied that the scarcity of the menhaden causes the scarcity of bluefish and drum ; I don't know any cause for the decrease, except because the menhaden is caught up ; once last summer, when I was on board a steamer, they said that they caught eighty drum in one haul the day before ; I used to have a purse net, and always caught large quantities of food fish with the menhaden ; always found lots of other fish among the menhaden, and saw them eat them, and have seen the water dyed with the blood ; I believe the nets in the bays detrimental to the fishing ; think a three-mile law would be a good thing.

MORRIS CRESSE.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

E. E. Roseman, aged thirty-seven, residence, Cape May, sworn—

Am a yachtman ; been fishing for eight years ; during that time the fishing has decreased ; during the time the menhaden steamers are off our inlet we cannot catch fish here ; have found menhaden inside of bluefish and menhaden ; always know drum to follow bonneys ; have seen bunkers two inches long ; think they come from the south ; I think if the fishing near the coast by the steamers was stopped, it would help the fishing very much ; don't know if it would help if they were stopped certain months ; had a party out to-day and had good fishing until some men set a seine in the channel ahead of me, and then we could not catch any more ; they were scared away ; if the Warden stopped all seine-fishing until September, it would be a good thing, and he should have some deputies to help him ; the fishermen with nets watch him and go where he 'aint ;

have been in the menhaden steamers ; have been given large quantities of good fish by the steamers from their hauls.

ENOCH E. ROSEMAN.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Charles P. Foster, residence, Philadelphia, sworn—

Am a fisherman and own a seine myself ; I think the fishing with seine nets is a great injury to the fishing in general ; I would gladly burn my seine if a law was passed prohibiting all net-fishing ; I sail parties, and cannot get enough fish to please them now ; there are a great many people alone, and if the fishing were good there would be a great many more come to fish and we could make more money ; the scarcity of fish is caused by the net-fishing ; the menhaden being fished up takes away the food for fish, and they don't come ; I know a man who was given a wagon-box full of fine weakfish from one haul made with a purse-net, by a steamer after menhaden, and they caught hundreds of good fish in the haul ; I, about thirty years ago, formed a fishing club at Atlantic City, and we then could catch hundreds of all kinds of fish near the bridge ; after they started to haul seines there the fish became scarce, and grew more so ; so much so that I spent \$65 in a trip, summer before last, and I could not catch sixty-five fish there.

CHAS. P. FOSTER.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

WARETOWN, N. J., August 30th, 1888.

Amos Ridgway, aged twenty-seven, residence, Waretown, business, fishing and yachting, sworn—

Q. What do you think interferes with the fishing most ?

A. I think the menhaden steamers ; I have seen eight or ten along the break, fishing, at one time ; when the menhaden is in the bay, there is bluefish ; they are the main food of bluefish ; I have seen them feed on them and have found them in the bluefishes' stomachs ; I think they spawn in the bay in the spring ; I have caught them

then that had spawn in them ; menhaden I consider a first-rate food fish ; we used to make great account of them to salt for the winter ; I think the net-fishing is a great disadvantage ; the Yarnalls caught one thousand eight hundred pounds rock or striped bass at one haul, a short time ago ; the net men now fish at any time with any kind of net ; hauling a seine disturbs hook-and-line fishing for some time afterwards.

AMOS RIDGWAY.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Recalled—

Q. Did you ever fish for sheephead in our bay with a net ?

A. Oh ! yes.

Q. What size net ?

A. One of one hundred and fifty fathoms—net with a five-inch mesh.

Q. Whose net was that ?

A. Enoch H. Jones' ; he owned several nets,

Q. When did you usually use it ?

A. Always at night.

Q. How many other nets did you know of then ?

A. Several.

Q. How long did you use it ?

A. One season.

Q. Why did you always use it in the night ?

A. The Fish Warden used to come out sometimes and would see us if we fished in the daytime ; all the nets fished at night ; we had a signal to notify each other if he was coming.

Q. Did you ever lose any ?

A. Once a Warden took nine out of fourteen we had set.

Q. Do you think the netting is used at night yet ?

A. Yes, constantly ; every two or three nights.

Q. Did you ever have a fight with the Warden ?

A. No ; the Warden didn't take anything, as we saw him ; the gill nets are about three-inch mesh ; I am now sailing a yacht with parties.

Q. Which do you do the better at ?

A. Yachting.

Q. Suppose all net-fishing except the large-mesh set-net was stopped, would fishing be better?

A. Yes, very much.

AMOS RIDGWAY.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Charles Bowker, aged sixty-two, residence, Waretown, business, following sea, sworn—

I am familiar with the ways of fishing; they use drift, haul and gill nets; the haul seines interfere most with fishing by frightening fish, disturbing their food and can't get any fish after a ground is hauled.

Q. What is the effect of hauling a seine over sheepshead ground?

A. It scares and drives them away, so you can't get any after; it affects other fish the same way, striped bass, or rockfish, and weakfish especially; weakfish feed on small fish; bluefish feed on moss-bunkers, or menhaden; I have caught many a one of them that had them in them.

Q. If all the bankers were removed, would it destroy all the other fish?

A. I think it would.

Q. Do you think the menhaden-fishing interferes with the other fishing?

A. Undoubtedly; I think a law to keep them two or three miles from shore would help it; I have seen twenty or thirty around the mouth of Barnegat inlet fishing at one time; I have seen many small menhaden in the bay; I think they are spawned here.

Q. Do you think they could fish with the purse nets so they would not catch anything but menhaden?

A. No; they take all kinds every haul; weakfish come here and spawn; shad have been caught in the bay; I have seen the Yarnalls haul a net in the bay; we have no Warden this year.

Q. Do you think it is an advantage or disadvantage to have net-fishing in the bay?

A. A disadvantage.

CHARLES BOWKER.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

F. W. Thibault, aged thirty-three, residence, Waretown, business fisherman since a boy, sworn—

During that time fishing has declined; I think it is because of the menhaden steamers; they come close to the shore and take menhaden and all other fish; they come as close to the shore as they can and keep out of the breakers; it takes all the food and keeps it from coming in the bay; I think all the menhaden spawn here in the bay; I have cleaned them in the spring with spawn in them; think they spawn in July; I think a three-mile law would be greatly to the benefit of the fishing; I have seen as many as twenty-five steamers in a day; they use an inch mesh; I sometimes set gill nets and catch all kinds of fish; I have known nets to be hauled over ground recently; what fish they don't take it scares away; as late as this spring one man had a net over the main channel every day; it was between one hundred and one hundred and fifty fathoms long; the nets have entirely killed the sheepshead-fishing this summer; hauling a net over a ground seriously affects line-fishing for several days after; gill nets are not so bad as the haul nets; from the middle of April to the 15th of June the food fish is ready to spawn; with the large number of gill nets (about three hundred in the spring), it seriously affects the line-fishing; I believe, however, the haul or seine nets to more seriously affect it because, on account of the size of their mesh, they take all kinds and all sizes; I have seen the steamers unload; in a hundred ton steamer, I think, there is an average of one thousand pounds of food fish; I have seen quite a number unload; I believe if there was no net-fishing the parties now engaged in it would make as much money by hook-and-line fishing and yachting parties; after June 15th I don't think gill-netting with set-nets with a three-inch mesh, would injure fishing in the bay; I have seen net-men haul a net to the shore and leave lots of small fish on shore to decay; that is the custom.

Q. Do you think the majority of men around here are of the same opinion as you?

A. Yes, I do; I think mossbanker is one of the best tasted fish that is in the bay; I consider them a food fish.

Q. If everybody were prohibited from fishing with less than three inch mesh, do you think it would help fishing?

A. I do, as there then would be plenty of small fry to go up.

Q. What do you think about eel-potting?

A. It is wrong; they pot them as soon as they come out of the mud and keep them so fished out that there are none for us poor people to spear in the winter when we need them.

F. W. THIBAULT.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Ivins Asay, aged thirty-six, residence, Waretown, business, fisherman, sworn—

Q. Has the food-fishing business been interfered with in this neighborhood?

A. Yes; the menhaden-fishing interferes with it; they take the menhaden, which is the food of other fish; I have seen plenty of bluefish among the loads of the steamers; the menhaden is used quite a good deal around here for food fish; there is hardly any more here now; a three-mile law would be a good thing, especially for the bluefishing; the menhaden steamers now use a very small mesh.

IVINS ASAY.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

ATLANTIC CITY, N. J., September 12th, 1888.

William N. French, residence, Camden, N. J., aged forty-five, business, dealer in terrapin, sworn—

Q. Ever been a fisherman?

A. Yes, sir; for fifteen to twenty seasons.

Q. During that time has the fishing interest declined or otherwise?

A. Declined.

Q. What, in your opinion, is the reason?

A. I thought because the purse nets and nets inside in the rivers and streams and reaches; what fish was not caught was scared away; this I have reference to is up the river, &c., away from the ocean.

Q. What did they use the fish for?

A. They were sent to the factories to be ground up.

Q. What fish did they take?

A. Supposed to be fishing for menhaden; I have had men who

were working on the nets come to me and ask me to purchase the food fish they caught.

Q. Do the mossbunkers serve as food for other fish?

A. Yes, sir; bluefish and weakfish, and I think I have seen them inside of flounders; I have taken menhaden nine and ten inches long out of the stomachs of very large weakfish; whenever I have seen small menhaden it has been near fresh water; my impression is that that they are spawned inside.

Q. What would be the effect if the menhaden were taken up in large quantity?

A. Destroy them; I think the other fish follow the menhaden to the shore.

Q. What, in your opinion, would most benefit the fishing interest; I mean what laws?

A. To make menhaden vessels keep two or three miles from shore; I think that would benefit it.

Q. What is the smallest mesh you have seen used in the bay?

A. Two-inch.

Q. How do the prices compare now with several years ago?

A. Formerly fish were worth four and a half cents per pound; now the same is ten and twelve cents per pound, wholesale.

Q. Do you consider menhaden food fish?

A. Yes; I like them when they are fat; I buy them for my own use; people like those that are fat, in fall—about October—coming south.

W. N. FRENCH.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Mr. French, recalled—

Q. Do you know of vessels loaded with barreled mackerel?

A. Yes, sir; I bought them for fifty to seventy-five cents a hundred, and know they were caught by purse nets.

Henry C. Adams, residence, Atlantic City, aged forty-eight, business, carpenter, sworn—

I was a fisherman for twenty years.

Q. Has the fishing interest declined in the past twenty years?

A. The fish has fallen off very much.

Q. Why.

A. Catching them off with purse seines and drag seines; they fish for menhaden; they take every thing inside the circle; I know they take food fish; I fished on a purse seine for fourteen years, from Maine south; we caght some bluefish and others; generally bluefish, which are around the edges; they feed on them; have taken them out of their stomachs as long as eight or ten inches; if all menhaden were removed we would have no bluefish; have seen them in rock, weak and drumfish.

Q. Do you have any theory as to where the menhaden are spawned?

A. Yes; at sea or south; I have seen them an inch long, a million in a school, outside; I don't think the menhaden have spawn in them east of Cape Cod; have seen them on this coast in both spring and fall with spawn; have caught menhaden as early as March, with spawn—as early as May; they are poorest in July; they are fattest from last of October to November; I have used the fat ones in fall as food fish; we sold them sometimes by the hundred pounds to salt.

Q. Do you think a two-mile law would be a benefit?

A. I think there would be more bluefish; the supply of menhaden has fallen of; the menhaden is the food of the bluefish, and the decrease in them causes the decrease in bluefish, I think.

Q. What size mesh was used?

A. First we used two and a half inches; at last we used one and three quarters or less.

Q. Do you think it would be the best thing for most people that all net-fishing should be prohibited during certain months?

Q. (By Mr. Hall),—Did you ever know any considerable number of food fish ground up for oil?

A. No; not very mnch.

Q. Are bluefish more abundant some summers than others?

A. I can't say, as I have not noticed it.

Q. Are menhaden more abundant one summer than another?

A. I can't say as they were, but think they have gradually fallen off on account of their being caught up.

Q. Are drum a food fish?

A. Yes; but not so much so as the menhaden.

Q. Are bluefish always found with menhaden?

A. Most always.

Q. Do you think bluefish live on menhaden more than on any of the other fish?

A. Yes, sir; because there are more menhaden.

HENRY C. ADAMS.

Sworn and subscribed before me.

E. G. HARRISON,

Notary Public.

John Delancy, residence, Great Egg Harbor, aged forty-two, business, railroading, sworn—

I am also a practical fisherman; I fished with purse nets twelve years, till four years ago.

Q. In fishing with purse nets do you ever catch any food fish?

A. No, sir; except once in a while a few snapping mackerel; I have fished as high as two weeks and not caught enough for a mess; sometimes we caught a good mess every day; by a mess, I mean what we wanted to use aboard the sloop.

Q. What are the indications of a school of menhaden?

A. We see them playing on top of water; they are sometimes followed by porpoises and snapping mackerel; they overtake them and get in amongst them; they sometimes drive them ashore.

Q. Why do they go among them?

A. They go after them to eat them; I have found pieces in the snapping mackerel's stomachs.

Q. How do you keep the bluefish out of your net?

A. They go out under the net.

Q. What is the size of the mesh.

A. From two to three-inch mesh.

Q. Are the menhaden as plenty?

A. No, sir; I don't think they are; menhaden are driven away by shark and bluefish.

Q. (By Mr. Fifield).—Did you ever catch enough food fish to take in to the factory folks to have to eat?

A. I have so, but not very often, maybe two or three times in a season.

Q. Do you ever find menhaden in the stomachs of sharks?

A. Yes, sir; I have found whole menhaden in them.

Q. (By Mr. Hall).—In your twelve years of experience did you

ever know of any food fish to be taken to the factory and ground up for oil?

A. No, sir.

Q. Did you ever take any quantity of weakfish?

A. Yes, sir; once by mistake we went around a school of weakfish, thinking they were menhaden; we took about fifteen to twenty thousand of them; I saved a couple dozen to eat, and then I dumped the rest out of the net, not injuring them.

JOHN DELANCEY.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Joseph P. Lake, residence, Bakersville, aged forty-four, business, fish-cooler and oil-tender in a fish factory, sworn—

I once followed fishing for ten or twelve years in Great Egg Harbor inlet.

Q. Has food fishing increased?

A. Increased in our waters; there is more food fish taken now from our waters than there was fifteen or twenty years ago.

Q. (By Mr. Fifield).—Do you know in your experience in a fish-oil works of any food fish having been cooked up for oil?

A. None, only a few drum, maybe a hundred weight in a season, and I suppose I have cooked twenty-four million menhaden; we generally fish two and a half inch mesh; I have heard that some use smaller.

JOSEPH P. LAKE.

Sworn and subscribed before me

E. G. HARRISON,
Notary Public.

Wesley Ingersoll, residence, Seaview, aged forty-four, business, fisherman generally, sworn—

I followed menhaden fishing five seasons; I have also followed fishing for food fish as a business, with hook and line and net; I have not noticed a decline in food fish.

Q. (By Mr. H.)—What is your opinion as the decline the other fishermen gave?

A. The purse nets are no injury to the food-fishing; because,

before the steamers came, could not get any of the large weakfish; it is my opinion that I cannot see where it is an injury to the food-fishing; the catching up the menhaden leaves more of the sediment in the water for the other fish to use.

Q. Is the bluefishing as good as formerly?

A. No, sir.

Q. Is the weakfishing as good?

A. Yes, sir.

(Note.—Decline to answer what would benefit the bay-fishing with nets and to venture as to a good law.)

Q. Do you think the drag nets between May 15th and September 15th an injury?

A. Yes; I do.

Q. How many men in the bay, within fifteen miles, do you think are engaged with nets?

A. I might say one hundred; I think the cause of decline in menhaden is because they have been caught up; I know of one steamer with a weakfish net that took \$4,000 worth of weakfish once; in the five seasons I fished I only caught a few weakfish once; last year I caught large quantities of weakfish that was sold for one and three-quarters to two cents per pound—caught by hook and line.

WESLEY INGERSOLL.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

William B. Pangborn, residence, Atlantic City, aged forty years, business, boatman and yatchman, sworn—

Have been a fisherman eleven seasons.

Q. Has the fishing interest increased or decreased during that time?

A. Decreased.

Q. To what do you attribute the decline?

A. To the taking of the menhaden; the principle food fish is the weakfish and bluefish; the blue fish feed principally on menhaden, in my opinion, because I have cut mossbunkers out of the bluefish; I think that there would be more bluefish if there were more mossbunkers; formerly we caught from one hundred and fifty to two hundred bluefish to a boat in a half day, but I have not done it in the last seven years; have fished in bay with hook and line, but

never with a net; some people eat the menhaden; bluefish and big weakfish mainly feed on the menhaden, also large sea-bass; have seen as high as eight or nine steamers off inlet; amongst them were large numbers of line fishermen.

WM. B. PANGBORN.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

F. W. French, residence, Atlantic City, aged thirty-eight, business, carpenter for the last year, formerly was fisherman for twenty years, sworn—

Q. Do you know of mossbunkers being used as a food fish?

A. Yes; use them the same as any other fish, especially salt them for use in winter; I have eaten them and consider them a good fish; menhaden boats formerly fished with three-inch mesh, now they use one about one-third size; the mossbunkers are not so many nor so large as formerly; they are thinned out by fishing; my opinion is that the menaden-fishing destroys the fish coming into spawn in the bay; the weakfish go up to fresh water to spawn; I attribute the menhaden getting smaller to the catching the larger ones off; bunker bait is the best that can be used for mackerel; now the mackerel fishermen use herring bait.

Q. (By Mr. Fifield)—What time do weakfish commence to spawn?

A. About 1st of July.

Q. How late do you find them with spawn in them?

A. Not after 1st of September.

Q. Did you find them with spawn as late as August?

A. Yes.

FRANCIS W. FRENCH.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

John A. Showell, residence, Atlantic City, aged forty years, business, fisherman since I can remember, sworn—

Now we don't catch so many fish; think it on account of haul seines and purse nets; the purse nets catch up the bluefish food; the bankers is best food for bluefish; have seen menhaden inside the blue-

fish ; my opinion is that when the menhaden steamers crowd too close to the coast it hurts the food-fishing ; the weakfish and bluefish spawn in May and June ; have seen nine steamers at one time within two miles of mouth of inlet ; have seen them purse up the menhaden and weakfish together ; think the inside nets, in June, July and August, is an injury ; when a ground is swept over we cannot catch any fish there for some time ; consider fat bankers one of the best of food fish ; prefer them to weakfish.

Q. (By Mr. Fifield).—How did you know these weakfish were in the menhaden ?

A. I saw them there ; was alongside when they were boiled.

JOHN A. SHOWELL.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Adam Conover, residence, Atlantic City, aged fifty-seven, business, fisherman, sworn—

Been a fisherman since a boy ; during that time the interest has been interfered with ; I think by the purse nets catching the food ; the menhaden are the best food for bluefish, weakfish and drum ; have seen them in their stomachs ; think a two-mile law would be a benefit ; I think the food fish and menhaden all spawn in our waters ; I think the fish spawn in May, and the law ought to cover that period ; haven't seen any Fish Wardens this summer ; lately, don't think the Warden is any use ; think the bay net-fishing is very detrimental to the fishing interest ; the inside haul nets use one-and-a-half-inch mesh ; think that size mesh interferes with many small fish that would grow ; have seen five steamers at one time ; once saw a steamer drift clear up the inlet to our dock before they got the net pursed up ; I think the purse nets have destroyed the drumfishing ; consider drum a good fish ; would rather have them than any other.

ADAM CONOVER.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Gideon Conover, residence, Atlantic City, aged sixty, business, fisherman for twenty-seven years, sworn—

Q. Has fishing interests increased or decreased?

A. Decreased.

Q. Is bluefish the best food fish?

A. The most valuable.

Q. What made the bluefish scarce?

A. The purse-net fishing.

Q. How does it interfere?

A. Because they catch the mossbunkers and must catch some bluefish with them; you never find bluefish without you find mossbunkers; I know the bluefish feed on the bunkers, as I have taken them out of the bluefish; I think the bluefish more generally follow the bunkers, but they will feed on weakfish; I think if the purse nets were kept two miles from shore it would help the fishing for blue and weakfish; where purse-net fishing is going on it interferes with the weakfishing close to the nets; I am of the opinion that the bluefish spawn around here; the weakfish spawn here in May; don't think the mossbunkers are used as a food fish; have seen as many as seven or eight steamers off the inlet; bunkers are extra bait for sea-bass, also the bluefish feed on the bunkers.

Q. (By Mr. Fifield).—Did you ever see any bunkers in sea bass whole, except what has been cut up for bait?

A. No, sir; never seen whole ones.

Q. Do you believe sea bass feed on bunkers?

A. No sir; I don't think they do.

His
GIDEON X CONOVER,
mark.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Jackson Conover, residence, Atlantic City, aged nineteen, business, fisherman, sworn—

Q. (By Mr. French).—Have you seen the steamers catch anything except menhaden?

A. Yes, sir; we got once about a hundred weight from a net that they threw out; have seen as high as three steamers at a time; don't remember having seen more.

Q. (By Mr. Fifield).—How did you get those hundred weight?

A. They meshed, and the men shook them out,

Q. Did the steamers take any aboard?

A. Don't know as they did.

His
JACKSON X CONOVER.
mark.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

James S. Miller, residence, Atlantic City, aged thirty-seven, business, fishing, sworn—

Been fisherman all my life; I think the food-fishing interest has been interfered with in this section of the State; purse-net fishing has interfered with it; it catches up all kinds of fish, menhaden, bluefish, weakfish, sheepshead and red drum; that is all the kinds I have ever seen them take in their nets; the menhaden are food for other fish; I use the menhaden every winter salted; some other people (mainly boatmen) around here use them; they are not so plentiful now as formerly; they are being caught up; bluefish are not so plentiful now as formerly; two or three-mile law would be beneficial; weakfish spawn here; I have procured food fish from the menhaden steamers where they dumped them from their nets; have got red drum, bluefish and sheepshead; once, a year ago, I saw one net pursed up so full of red drum that they could not get it together; I could not see any other fish in it; they pour all kinds in the hold together; if the food of the bluefish was removed the fish would not come here at all; all nets, in my opinion and experience, is a detriment to the fishing interest, and especially in summer, from March to November; my opinion is, that if the nets, both inside and out, was continued for the next five years, it would be impossible for anybody to make his living by day line fishing; the Wardens are no good at all.

Mr. Bailey—

There is always a market for red drum; there are about fifty nets, employing about one hundred and fifty men, within ten miles of here; dragging a net over a sheepshead ground ruins the ground; dragging over weakfish ground in May not only scares the fish away, but also drags millions of spawn ashore and ruins it; weakfish spawn

in May ; two kinds of fishing is good as it was twelve years ago ; I would average as much as a net does now ; fish was about the same then as now, seven cents or eight cents a pound ; every half mile you keep nets away from the shore you help the fishing ; purse nets are not as numerous this year around here ; bluefish and menhaden are generally together.

Mr. French—

There are no sheepshead this summer ; think night setting worse than in day ; nets inside are from two to two-and-a-half-inch mesh ; have caught cod with menhaden in them.

Mr. Fifield—

Fish are not so plenty as five years ago, except the weakfish this summer ; the people of Atlantic City have fish shipped here to supply the market ; the reason of the plenty of weakfish now is that they are schooling up to go south.

JAMES S. MILLER.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Capt. Daniel B. Adams, residence, Atlantic City, aged forty-two, business, fishing with hook and line for twenty years, sworn—

We find them more plentiful now than heretofore, especially during the last three years ; I mean especially cod and bass ; there are about twenty smacks here ; we use menhaden for bait ; we buy the menhaden from steamers ; don't think the steamers have hurt anything ; muscles and menhadden are the food of the bass and cod ; plenty of blufish have been caught this summer ; there are no menhaden ; plenty of bluefish are caught on the muscle beds—large ones ; I don't think it would hurt if all the menhaden were destroyed ; I believe that weakfish, bluefish, &c., feed on muscles ; I don't remember seeing any small fish in the stomachs of menhaden ; never took any menhaden out of bluefish or weakfish ; have traded bass with steamers for menhaden for bait, as they had not caught enough to use ; we chum the menhaden for bait,

Mr. French—

Did not catch as many cod last season as formerly.

DANIEL B. ADAMS.

Recalled September 14th, 1888—

Those smacks I think caught five hundred tons in a day, and I think a thousand-ton boat could have been loaded.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Lewis E. French, residence, Atlantic City, aged thirty-five, business, fishing and farming, sworn—

Q. (By Mr. French).—Do you consider menhaden food fish?

A. Yes, sir; I buy them for \$1 a hundred; I have found on their steamers red drum, porgy drum, weak and bluefish mixed in with the menhaden, also rockfish, some weighing seventy-five pounds; once a two-hundred-and-eighty-pound turtle was caught in a net; all the men on the steamer were putting up fat menhaden for their own use—each several barrels; and they sold some at \$3 to \$5 per barrel; that was last October; I know that the nets were dragged over the ground about here and broke up the grounds; they are using two and three-inch mesh inside; the mesh should be increased; they now catch less pounds of fish in our rivers here now that they formerly caught hundreds of pounds; I own a fifty-two-fathom three-inch mesh; I think it would increase the fish if everybody would increase their nets to three-and-a-half or four-inch mesh.

Mr. Bailey—

I think any fishing where fish spawn is an injury; weakfish spawn in our bays and rivers; I once set a small net on the flats in April, out of season, to find out when and where the fish spawn; shad come up our river in spring; never saw any fish spawn in absolutely salt water.

Mr. Fifield—

I think it was the "C. W. Harvey," Capt. Thomas Cowperthwait Sooy, New Gretna, a year ago, that caught the rock and turtle; he told me he had caught three tons bluefish, and sent them to Dock street market and never got a cent for them; he sent all his winter fish there.

Mr. Bailey—

Have seen menhaden as small as three inches; think the further the steamers are kept from shore the better for the fishing; several

years ago the sloops fished in Great Bay, and the fishing got so poor that we could not get a mess; it improved when they stopped pursuing in the bay.

Mr. French—

When I was a boy we would see small menhaden way up in the fresh water of Mullica river, in spring.

Mr. Bailey—

Once in April or May I found quantities of small menhaden on the marsh.

Q. (By General Wright).—Are you a menhaden fisherman?

A. No, sir; have been on a boat in the bay.

Q. Do they fish now inside for menhaden?

A. No, sir; except once in a while.

Q. Did you ever board a steamer outside the bar?

A. No, sir.

Q. How many food fish did you ever see on a steamer?

A. Four years ago I got some from Headly's steamer; I got eighty weakfish, twenty-nine bluefish, two porgy drum, and two hundred menhaden; sometimes the boats would go for two weeks and not get any food fish, and sometimes they would; they could not tell what was in the net till pursed up, so I have been told.

Q. (By Mr. Harrison).—How many men do you think are engaged for a living with line and nets and yachting.

A. Something like one hundred men around Bass river and vicinity that have nets.

Q. (By General Wright).—To what extent are menhaden food fish?

A. They are valuable, as we get them first, and again in the fall for winter use; all the menhaden men salt them every fall; we are all glad to get them in the spring; the farmers also use them when they caught them; Mr. William Simons makes a business of buying the fat menhaden in the fall, and peddles them up the bays as far as Forked river.

LEWIS E. FRENCH.

Sworn and subscribed before me,

E. G. HARRISON,

Notary Public

SOMERS POINT, N. J., September 14th, 1888.

William H. M. Keates, residence, Somers Point, aged thirty-three
business, station agent, sworn—

Resided here seven years ; was at Atlantic City twenty-five years ; have had opportunities for observing the fishing interests ; the business varies ; last and this year it was good ; for two years before, it was not so good ; I refer to weak—kingfish principally ; bluefish are caught here occasionally ; the king and weak are about the same price, five cents per pound ; blue the same, or six ; the price varies according to the market ; the fishing interest during the last few years has been about stationary ; the boating interest is a hundred times more benefit to this vicinity and neighborhood than the fisherman for market ; that interest is about the same ; I do not think the purse-net fishing interferes with either interest, because it is evident that the interests and fishing do not vary as to whether the steamers are fishing or not ; can't tell about whether the menhaden are decreasing ; ordinarily there are about one hundred and fifty or two hundred men employed in the purse-net fishing, mostly men of families ; there are about one hundred fishermen engaged in this vicinity ; the menhaden fishermen don't fish inside at all ; the sheepshead, weak, king and flounders, rock perch and some others spawn inside our bays ; the Smithsonian Institute in its examination here last summer did not experiment about the menhaden ; I don't like the menhaden for food.

Mr French—

The one hundred and fifty purse-net men I spoke of, was last year ; there are four haul nets around here ; they use a two-and-a-half-inch mesh ; I don't consider them detrimental in summer time, but it is in spring when the fish come here to spawn ; it is an exceptional case for a net-owner to get rich ; the netting should be divided into the purse, winter and summer nets ; have seen as high as forty-nine boats fishing at one time in this vicinity.

Mr. French—

Night-fishing is more injurious than day-fishing ; no net should be used than three-inch mesh for salable fish.

By Mr. Harrison—

Net-fishing should be prohibited entirely from May 1st to June 20th ; during those months large catches are made and overstock the market, and do not clear over one and one-half cents a

pound ; the fish come in here then to spawn ; the most they catch then has spawn in them ; if they did not fish then, the fish would increase, and the nets would make twice as much money ; the shad-fishing don't amount to much here.

WM. H. M. KEATES.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Samuel Lee, residence, Somers Point, aged fifty-seven, business, farming, used to fish for a business, sworn—

In my observation the business has increased ; I think because of the plenty of fish and there are more people engaged in it ; when I was a young man there was plenty of all kinds of fish ; then there was not more than eight or ten nets, now there are a hundred or more ; hauling a net scares the fish away for awhile ; I don't think seine fishing, except in May and June, when the bluefish spawn, any injury to the fishing ; the menhaden come in our bay in April and May ; have caught menhaden ; have eaten them, but don't prefer them ; have known them to be salted ; think the menhaden are food for weak and rock and bluefish ; have seen menhaden in them ; if the menhaden were destroyed, and no other food was in its place, it would hurt the fishing ; have bought fertilizer from the fish factories for my farm ; I like it ; the factories employ about one hundred people, and there are about two hundred and fifty more who fish inside with nets in this vicinity, and about two hundred and fifty more who use hook and line for business and sail parties ; the inside nets use two-and-one-half and two-inch mesh, mostly two-inch, measured stretch ; the winter fishing with nets destroys many small fish, which are left to die on the shore.

Q. What is the most injurious thing to fishing ?

A. To my knowledge, it is the small mesh ; it should be at least three-inch mesh ; and, also, to fish with nets at night.

Q. (By Mr. Fifield).—Do you think the menhaden fishing any injury ?

A. No, I don't think it is.

His
SAML. X LEE.
mark.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

John C. Fifield, aged sixty, residence, Bakersville, business, owner of fish-oil factory, sworn—

Q. (By Mr. Harrison).—Has the fishing interest increased or decreased?

A. I think it has been better for last two years than for a few years previous; I cannot tell the cause of it, except, I suppose, it is from natural causes; there are about one hundred men fishing now to one formerly in this vicinity, and the average catch is about the same; I am engaged in menhaden fishing; we use two-hundred fathom nets (about), six-hundred-mesh deep, two and a quarter to two and a half mesh, stretch measure—the same size I always used; they generally use same size mesh, except in Chesapeake bay, where it is smaller; two boats and steamers are used; the menhaden is caught by schools only, on the surface of the water; when they see a school they set out the two boats and encircle the fish with the net; they then come together and draw on the purse rope; as they draw the net it heaves it from the bottom; they then gather in the slack net, and then the steamer comes alongside and bales the net out; we occasionally catch some bluefish and drum; we always separate the good fish to cook; we don't usually get enough to feed the crew; the factory hands very rarely get enough to cook; the menhaden are cooked; we cook about seventy ton at once, and under a hydraulic pressure extract all the water and oil; the scrap is placed on a platform and dried; what we don't dry we treat with sulphuric acid and make into phosphate; the yield of oil to the thousand fish varies; fourteen gallons to the thousand was the best we ever had; also, as low as a pint or quart to the thousand was lowest; in the summer they are poor, after they spawn in the spring; they are full of spawn as they go away late in fall; they come north in April; don't know when they spawn, where they spawn; have heard of a few that had spawn in them when coming north in spring; have known them to be so far south as Florida; the oil is refined and used in mines, &c.—curriers; it is also sent to Europe; the price varies from eighteen cents to forty-three cents per gallon; we grind the scrap and sell it to the farmers for \$34 per ton; we also make crude guano and sell it for \$18 per ton; we also make a manure for potatoes especially; we make three brands of phosphates, which sell at \$25, \$30 and \$35 per ton to the farmers; there are three factories within a short distance of here; only one is running now; one has

been abandoned and the stream has closed; the one which was abandoned went to Virginia because they thought they could do better; last year the menhaden were plentiful and large and fat; previous to that, also good; many years fish are scarce, I think because they pass us too far off shore that we miss them; we sometimes fish four or five miles off shore; generally we find the fish two or three miles from shore; it is not profitable to fish much further; menhaden is food for bluefish; I have seen them in bluefish, whole and in parts; have also seen small weakfish and silverfish in the bluefish; I think a bluefish will eat any other fish, but eat menhaden mostly, as they are more plenty; three or four years ago, for from six to eight weeks we never caught a menhaden, and the bluefish were very plentiful, but we could not catch any; the bluefish had driven the menhaden ashore; have known the bluefish to drive the menhaden ashore; whenever we find large schools of bluefish we find no menhaden.

Q. (By Mr. French).—Did you ever catch any codfish?

A. No more than two or three.

Q. How late did you ever know the menhaden to stay around here?

A. As a rule they leave the fore part of December; have heard of them being seen in the bay later; have sold some few menhaden as food fish, but very few.

Q. Do you know of menhaden ever having been put up as sardines?

A. I have heard of its being done in Monmouth county; menhaden, I think, belong to the shad family; it lives by suction the same as shad or herring; they don't bite and eat things; I think haul nets at night more injurious than day-fishing with nets; I would prohibit net-fishing inside from May 1st to June 20th, to cover the spawning season; I would except shad; think a three-inch mesh seine too large; should be two and a half inch mesh; never, to my knowledge, did we ever get any quantity of weakfish and perch; we never grind up food fish; after about fifteen years in the menhaden business, do not believe that we are one dollar's disadvantage to the food-fishing industry, directly or indirectly, because there are hundreds of millions of menhaden yet; we are catching more menhaden now than ten years ago; our sales average, when the factories were running,

from fifty to sixty thousand dollars a year ; we employ from one hundred and twenty-five to one hundred and fifty men.

JOHN C. FIFIELD.

Sworn and subscribed before me

E. G. HARRISON,
Notary Public.

EVENING SESSION.

ATLANTIC CITY, N. J., September 14th, 1888.

Henry H. Souders, residing at Atlantic City, aged thirty-six, sworn—

Business, carpenter in winter and fisherman in summer.

Q. (By Mr. French).—Did you ever see any purse nets catch sheepshead along with menhaden ?

A. I did.

Q. Whose steamer was it ?

A. A Long Island steamer.

Q. Where ?

A. About three miles from shore ; they had a school of sheepshead ; they had about four hundred sheepshead, and offered them to us for four cents a pound ; they use a net that would have held small weakfish ; I consider inside nets an injury during spawning season ; should not fish from the middle of April to July ; after that I don't think it would hurt ; we have very little shad here ; I think the purse net fishing off the inlet a great injury ; they drive the fish off our coast ; fish are more plenty this year ; I think because the purse nets have not been fishing much this summer.

Q. (By Mr. Fifield).—When was that sheepshead catch ?

A. About six years ago.

Mr. Harrison—

Sheepshead were then fifteen cents per pound here.

HENRY H. SOUDERS.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Samuel P. Gale, residence, Atlantic City, aged thirty-three, business, yachting, sworn—

Have always fished.

Q. Do you think the purse nets an injury?

A. I think it is, and especially an injury to the bluefish; they were numerous before the steamers came here, now we don't get any; the bluefish is an important fish; the bluefish live on the menhaden and are enticed to the shore by the menhaden; have seen small menhaden in fresh water; purse nets at the mouth of inlets is an especial injury; have seen the steamers with a net pursed up full of weakfish; we once got a boatload of weakfish from those thrown out of a purse net; think inside seines an injury at all times; they catch a great many spawn fish in April and May; think the laws should not cover the whole State the same, as the interest is totally different in different localities.

CAPT. SAMUEL P. GALE.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

—————
Samuel Monroe, residence, Atlantic City, aged forty-three, business, yachting parties, sworn—

Been a yachtsman and fisherman about eight years; think the menhaden steamers interfere with the fishing business; in 1883 I sailed a party from Barnegat City to Atlantic City, and for several miles we saw dead weakfish that had been gilled by the purse nets and thrown away; there are very few menhaden this year, and no bluefish; very few men follow bluefishing here regularly; eight years ago two of us could make sometimes \$40 a day fishing for sheepshead; think the menhaden steamers scare the sheepshead away; the law about inside nets should prohibit in April, May, June and July, when fish are spawning; have caught weakfish with hook and line before they had spawned.

SAMUEL MONROE.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

—————
Albert Morris, residence, Atlantic City, aged thirty-seven, business, manufacture of fish-oil and guano, been in the business eighteen years, sworn—

The first six years I was in the business I followed fishing, and

during that time we did not catch one-fourth of the good fish we wanted for our own use, and we went two or three weeks at a time without catching enough for a mess; since that, for the next eleven years I have manufactured oil and guano at Great Egg Harbor; for the last year I have had a factory on the Chesapeake bay; while here we did not get on an average a half-dozen messes of fish on a boat; during that time we never manufactured any food fish, but once some drum; we employ from fifty-five to eighty-three men in a season in our factory, and have made, in the last three years, about \$68,000 worth of oil and guano; there are more bluefish in the Chesapeake than for many years formerly.

Q. (By Mr. French).—Do you consider drum a food fish?

A. Not very good; never sold any menhaden for food; don't know of menhaden being put up as sardines; the menhaden have this year gone east, this summer, and are not numerous on our coast; have seen the fat fish in the fall with roe in them; have seen them in the Chesapeake bay not over an inch and a half long; they came with the first fish, and only grew to about three inches by fall; with two steamers, in 1885 we caught four million two hundred thousand menhaden off Great Egg Harbor; in 1886, eight million six hundred thousand menhaden with two steamers; 1887, six million six hundred thousand with two steamers.

ALBERT MORRIS.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

John C. Hammell, residence, Absecon, aged forty, business, seafaring and yachting ever since I was twenty-one years old, sworn—

Q. Has bluefish been scarcer around here lately?

A. Yes, sir.

Q. Why?

A. The bait is scarce here; when there is acres of bunkers I can't, in sailing up the coast, catch any bluefish; I don't think the bluefish feed altogether on the bunkers.

Mr. French—

Don't think the haul nets interfere in June, but they do in July and August.

Q. (By Mr. Fifield).—Do you think the menhaden any injury to the fishing industry?

A. I don't see where it is.

J. C. HAMMELL.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Frank Parker, residence, Atlantic City, aged twenty-eight years, business, yachtman, sworn—

Q. Has the fishing increased or decreased?

A. I think the bluefishing has decreased; think because of the menhaden steamers; I know that the men on a menhaden steamer once hailed us, and offered to sell us some bluefish.

Mr. French—

I know that seine-fishing is done here in the summer, and is a great injury; I think they could make as much money with hook and line.

Mr. Fifield—

The net-men sometimes throw away some; last fall I caught twelve bluefish once; can't hardly find any now.

FRANK PARKER.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Adolphus Parker, residence, Atlantic City, aged twenty-nine, business, boatman and fishing, sworn—

During my experience the bluefish has mightily decreased; I think what the purse nets don't catch they scare away; the bunkers is food for most any fish except sheepshead; last summer a menhaden sloop laid its net around a school of drum off our bar and loaded the boat down and had to discard at least half they had in the net; we bought fourteen of her, and paid twenty-five cents a piece for them; think a two-mile law would be beneficial; the haul nets inside is worse than it is outside; think the law should be changed so as to cover May and June, when the fish spawn; the Fish Warden doesn't do anything.

ADOLPHUS PARKER.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Thomas F. Steelman, residence, Linwood, aged forty-three, business, captain of a menhaden steamer, sworn—

Have been engaged in the business nine years; I can't see where it is injurious to the fishing interest; we fish for menhaden; we never take any other except once in a while a bluefish about what we can eat along, and sometimes not enough; I think the bluefish feed on the menhaden; sometimes schools of menhaden are followed by bluefish; the quantity of oil gotten from the bunkers vary; the most I ever got was fourteen gallons from one thousand menhaden, and the least was less than five gallons from one hundred thousand menhaden; we use the flesh and bones to make a fertilizer called "fish guano" and "fish scrap."

Mr. French—

Never caught anything but bluefish in our nets; don't consider bunkers a food fish, but I can eat them; I like them; I don't consider drum a food fish; we use from two-and-one-quarter to two-and-one-half-inch mesh; think net fishing in May and June very detrimental, but not so much so in July; they are full of spawn in May and June; I think the weakfish is spawned in our bays.

Q. Where do the menhaden spawn?

A. I don't know. I have caught them in October and November, with spawn in them, going south.

Q. (By Mr. Fifield),—Do you think that fishing with purse nets outside frightens the food fish away?

A. No, sir.

Q. Why?

A. Because I never see them at top of water.

Q. What proportion of the fish that you catch in a season do you catch outside of three miles from shore?

A. Not over one-third of them; when we get off shore they dive us and get underneath and away.

Mr. French—

The nets are about six fathoms deep.

THOMAS J. STEELMAN.

Sworn and subscribed before me.

E. G. HARRISON,

Notary Public.

William Davis, residence, Atlantic City, aged twenty-seven, business, boatman, sworn—

Been fisherman since I was old enough ; during the last few years the fishing hasn't been so good as formerly—not so plenty ; I think because of the absence of food for them ; the bluefish feed on the menhaden ; have seen lots of menhaden in the stomachs of bluefish ; think if there was no menhaden, we would have no bluefish ; know that the menhaden is used as a food fish ; best in the fall to salt and corn down ; make good broiling fish.

Mr. French—

Know the steamers catch some good food fish ; have seen bluefish and weakfish in their holds ; they use about a two-and-a-half-inch mesh.

Q. (By Mr. Fifield).—Did you ever know food fish to be more plenty than this year and last ?

A. Yes, sir ; never knew bluefish to be so scarce as they are this year.

Q. About other fish generally ?

A. The fishing inside has been good this year ; the weakfishing don't differ much.

Q. How is the fishing outside ?

A. We have caught some few.

WILLIAM DAVIS.

Sworn and subscribed before me.

E. G. HARRISON,

Notary Public.

George W. Doughty, residence, Atlantic City, aged thirty-eight, business, fisherman, sworn—

Q. Has fishing interests been interfered with in the last few years ?

A. The weakfishing has been better this year than for several years past.

Q. Do purse nets interfere with the fishing ?

A. They do for drumfishing ; drum and bluefish eat menhaden ; menhaden is used as food fish ; I had some salted down last year.

Mr. French—

I have seen some weak and bluefish on the decks of steamers here at our wharf ; I think the law should be altered and nets should be stopped from middle of March to middle of June ; menhaden steamers use two to two-and-a-half-inch mesh.

Q. (Mr. Fifield).—What did the steamers do with the fish you saw them have?

A. I did not see them do anything with them; they did not sell them; didn't see any in the hold.

Mr. French—

Drum weighing from eighteen to twenty pounds are worth from \$1.50 to \$2 in Atlantic City; we don't catch many any more.

Q. (Mr. Fifield).—What quantity of menhaden are used as food?

A. Not many; people don't know how good they are.

His
GEO. W. X DOUGHTY.
mark.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Geo. Gail, residence, Atlantic City, aged thirty-one, business, seafaring, sworn—

Been engaged in fishing for thirteen summers, for a business; during that time I think the weakfish has increased and the bluefish decreased.

Q. What do you think has caused the decrease in bluefish?

A. I think on account of the menhaden steamers; the bluefish feed off the bunkers; seen them eat them and found them inside their stomachs; if the menhaden were taken away there would be no attraction for the bluefish; menhaden are used as food fish; I use them and like them; I was once on a boat last summer to get some menhaden for bait and they had a nice lot of weakfish and bluefish aboard; about a thousand; think the haul nets are very injurious.

Q. (Mr. Fifield).—What were they doing with those one thousand you saw?

A. They were putting them out of the net with the menhaden in the hold; have seen as high as eleven steamers at one time; I see a great many mossbunkers outside every time I go out.

GEORGE W. GAIL.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public

SEABRIGHT, N. J., September 20th, 1888.

Wm. H. Borden, aged fifty-five, residence, Little Silver, business, fishing and oystering, sworn—

Been a fisherman about thirty-six years ; during that time the food fishing interest has decreased ; I consider menhaden food fish, and think the large ones, in the fall of the year, as good a fish as swims ; there have been no menhaden caught here now for several years ; I have sold many thousand menhaden to people to cart home and salt ; there have been as many as forty thousand fish carted away on one day ; we then got \$1 a hundred ; the people who bought them said they preferred them to mackerel and some other kinds, including herring ; I am satisfied that the menhaden steamers have been the cause of the decrease ; they are smaller this year than common ; the menhaden are food for the bluefish ; have seen the bluefish eat them ; have taken as many as two or three bankers out of the stomachs of bluefish ; the taking of the menhaden diminishes the food for the other fish ; bluefish used to come in regularly on high tide to feed on the bunkers ; think a two or three-mile law would be a benefit ; I am sure that menhaden fishing is a great injury.

WM. C. BORDEN,

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Samuel T. Jeffery, aged thirty-five, residence, Seabright, business, fishing for about twenty-four years, sworn—

During that time the menhaden steamers have injured my business ; it used to be that we could catch quantities of fish with our nets ; for the last two years there has been no profit in it ; the purse-net fishing has interfered with our bluefishing ; the scarcity of the bankers is the cause of the scarcity of the bluefish, which come here to feed on the bunkers ; when the bluefish is feeding on the bunkers in a school the water is red around them ; I have found as many as three menhaden in the stomach of a bluefish ; a two or three mile law would be some benefit, but I think it ought to be stopped altogether ; have been on the steamers and seen them take in bluefish with the menhaden ; one steamer had caught some bluefish, and he gave several boat-loads to the fishermen anchored off ; one of the steamers gave a lot of small bluefish away to us yesterday ; the blue-

fish are much smaller and less every year; I think because the big fish feed on the bunkers alone; they have not the fish here now to attract them; the farther out you fish the larger the bluefish are; there are not half as many menhaden here now as formerly; I formerly owned a menhaden net, and we used to catch large quantities of fat ones and sold them to the farmers by the wagon-load to take home to salt.

SAML. T. JEFFREY.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

E. Disborrough, residing at Seabright, aged sixty-nine, sworn—
Business, fisherman for forty years.

The food-fishing has very much decreased during that time; bluefish feed on any kind of small fish; the mossbankers are not plenty; I have seen mossbankers, about twenty-five years ago, solid north and south, as far as you could see, that took two to three days to pass; I, to-day, saw a small school, the first I have seen this year; I think the reason is that they are caught up; the pursers are the worst enemy of them; there is no gill-net fishing here now as formerly; I think the mossbunkers as good a fish as swims the sea; I have helped catch as many as six thousand four hundred menhaden in our company, and sold them at \$1 per hundred, and three companies doing the same; the farmers and hucksters peddled them out, all we could catch; the price dropped at five shillings; it made a cheap fish for the poor people; have lived about two hundred feet from the surf for the last nineteen years.

His
E. X DISBORROUGH.
mark

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Jesse Howland, residence, Seabright, aged forty-three, business, fisherman and Justice of Peace about twenty-one years, sworn—

Purse-net fishing has been a detriment to the bluefishing because they take the food of the bluefish; sometimes we find menhaden in-

side of the large weakfish ; I have seen as high as two hundred wagons loading with menhaden to be used as food fish, each wagon taking from one thousand to two thousand fish ; there are about six hundred fishermen here and at Galilee, who earn on an average about \$300 a year, making about \$180,000 per year ; they pay about \$36,000 per year for bait.

JESSE HOWLAND.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

William Brem, residence, Seabright, aged thirty-five, business, fisherman, sworn—

I think the purse nets interfere with my business by catching up the mossbunkers, we used to fish close to shore, but now we have to go off ten to twelve miles from shore for fishing ; think if this menhaden business stopped that the fish would come near shore again ; about twelve years ago we caught menhaden and sold them to the farmers for food fish ; we have known the steamers to go to market loaded solid with big weakfish and Spanish mackerel ; when they are spoiled they grind them up for oil ; about three weeks the sailing purser took between six and seven tons of bluefish to market that they had caught in purse nets ; I have seen them catch several hundred weight myself ; the largest catch we ever caught in one boat is one thousand three hundred and eighty-five pounds ; have heard of one thousand four hundred pounds, but that was the best I ever heard of.

WILLIAM BREM.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Joseph Hennesy, residence, Long Branch, aged twenty-eight, business, fishing, sworn—

I have seen the menhaden steamers in their catch take weak and bluefish in quantity ; they had two sizes of nets—small and large—the smallest about a one-and-a-quarter mesh ; they catch the men-

haden in the spring, so we cannot get any; they destroy more fish in one month than any pound will in a year.

JOHN HENNESY,

Sworn and subscribed before me.

E. G. HARRISON,

Notary Public.

PORT MONMOUTH, N. J., September 21st, 1888.

M. C. Loshen, residence, Port Monmouth, aged forty-seven, business, fisherman, sworn—

Been a fisherman twenty-six years.

Q. Has the fishing business been interfered with in this locality?

A. Oh, yes! very much; when I was a boy we used to buy menhaden for fertilizer—caught with seines; Raritan bay (Monmouth county shore) was lined with seine nets; it was a good business; the season lasted about four weeks; the fish sold for six cents per bushel, of about one hundred to one hundred and twenty bunkers; they were larger then than now; in fall we caught them for salting on sea coast; it was a large business; they were highly prized when fat, and of a different flavor than in summer; they spawn late in the season; I think in southern waters; have seen them not over an inch long; they are more scarce now and smaller; about twenty years ago the boat would catch enough in a morning to run the factory; they did not seem to lessen in numbers until the steamers came around, when they rapidly diminished; there are very few steamers here this summer; our food fish has been very scarce until this year, when it is better; the bluefish and weakfish decreased in about the same proportion as the menhaden; I have seen the menhaden in their stomachs; menhaden is the best bait we can use; think a two or three-mile law would be a benefit; I think the increase in blue and weakfish this year is because they can get small menhaden here this summer; we caught a few large, fat menhaden this morning, and they were in demand to salt down to keep for winter; have known of the steamers to catch numbers of food fish in their purse nets; I think the small fish entice the good fish; the weak fish are following the small menhaden and feeding on them; have caught weakfish with three large menhaden inside them; the boxes would average three hundred and fifty pounds of fish; the menhaden do not reproduce in May and June; they have spawn in them only in the fall.

(Note.—Mr. Loshen produced before the Commissioner a variety of sizes of menhaden as evidence, and showed the different ages as to size, and proved that until they reach about the age of seven years they did not have any spawn in them.) It is my opinion that if the steamers were stopped the whole business would regulate itself, and the sail rigs would not catch sufficient to injure anything.

M. C. LOSHEN.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

George O. Howard, residence, Port Monmouth, aged thirty-six, business, fisherman for menhaden and others, sworn—

Been fishing sixteen years; menhaden were plenty then; about twenty-four years ago we could catch any number of menhaden with haul seines; there is not a thousand now to where there was a million; have worked at purse-net fishing; it is very destructive to other fishing; I have seen whole loads of weakfish stewed up for oil; I have taken as high as three hundred and eighty bluefish in one haul of over one thousand bushels of menhaden; at this season they catch more food fish in the purse nets than at others; been in the factories and as late as yesterday I saw numbers of food fish ground up; the engineer picked up over a kegful of good fish right off the top of a load; I have caught as high as five Spanish mackerel in a haul; I have an idea they spawn in every bay and inlet they happen to stop at; I have seen the small ones, I think, that were spawned in this bay; the nets were formerly two-and-a-half to two-and-three-quarters mesh; now they use two-inch mesh, stretch measure; the menhaden by the steamers has been a terrible injury to all kinds of fishing, and will continue so, unless restricted by law as to time and mesh; don't think a three-mile law much good; the steamers should be stopped, and also regulate the mesh and confined to the sailing vessels alone; the steamers have double gear, and carry five to eight hundred thousand fish, and fish everywhere; one steamer can carry one and a half million fish; know that they used here to put up the small mossbankers as sardines; I know it; there were three places here did it; all the employes on the Yankee fishing steamers and sloops used to have his barrel and salt to get his supply of fish for winter; we used to make a business of selling them for winter; one boat used to come here and made four trips, carrying each time

two hundred barrels, salted just the same as mackerel ; the menhaden were sold by me in New York, fresh, at \$3 per hundred, to be peddled; I once sold six thousand ; another man I know went every week, and has sold as high as fifteen thousand ; the bluefish feed on the menhaden ; I know that people all through the country used to purchase and salt some every fall ; know of one order once that was put up, of one hundred and eighty barrels, there.

GEO. O. HOWARD.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

George C. Henry, residence Port Monmouth, aged thirty-five, business, fishing for past twelve years, sworn—

The purse-net fishing has interfered with my business ; they take mossbunkers usually, but one sailing purser took about six ton of bluefish in one haul ; they took them to market ; they generally bring in among their load some weak, blue and butterfish ; the purse nets generally get to the bottom and catch all the kinds they lay around ; the bluefish feed on the bankers—I think they come here for the bluefish ; the mossbankers is a food fish ; my father used to get them by the barrel and I used to live on them ; they will sell now readily, to salt, for \$1.50 per hundred ; the net is smaller now ; I think the menhaden steamers an injury to my business ; one steamer will catch more than twelve sail rigs ; the steamers come in our bay to fish ; one steamer caught more fish here in one day than I have caught in a month ; that is against our State law, but there is nobody to enforce it here and catch them ; we used to have schooners to use in fall to catch the menhaden to salt, and make into fertilizer ; there were three factories here that used to put up from one hundred and fifty to two hundred bushels a day as sardines in different ways ; they were called American sardines, ocean trout and shadines ; the mendaden fishing in our bay is greatly to the injury of our business and the consumers.

GEO. C. HENRY.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public

Lawrence Fisher, residence, Port Monmouth, aged forty-seven, business menhaden factory, sworn—

They catch good fish when they purse our nets; not many, but some; the menhaden are very small this season; some of the nets have been made smaller mesh, to catch the small fish; the bluefish feed on the menhaden; been operating a factory for ten years; every year the menhaden are scarcer; the steamers are the reason of the scarcity; the fish are so small this season that I thought they ought not to be caught, and I shut my factory; the men whose fish I buy wanted to get a smaller mesh net and continue; the lowest I ever got was two gallon to the thousand fish, the best was twelve gallon; the value of the oil has been from fifty to twenty cents per gallon; average, thirty cents; takes fifteen thousand five hundred fish to make a ton of guano; now the fish are smaller this year; when the fish run of good size it takes about fourteen thousand; the price now is \$28 per ton; is called fish guano; there are about ninety men employed in the five factories a good season, for seven months; know that plenty of the factories put sand and other substances in the fish scrap to make it heavy; consider menhaden a good food fish.

LAWRENCE FISHER.

Sworn and subscribed before me,

E. G. HARRISON,
Notary Public.

C. M. Morris, residence, Port Monmouth, aged fifty-one, sworn—

I am in the menhaden factory business and heard all the testimony just given by Mr. Fisher, and his experience has been just the same as mine, and I endorse all he says; also think the menhaden spawn all along the coast.

CHAS. M. MORRIS.

Sworn and subscribed before me,

E. G. HARRISON,
Notary Public

James E. Hubbs, residence, Port Monmouth, aged fifty-four, business boatman, employed in the Iron Steamboat Company, sworn—

I know that the small menhaden are put up as sardines in boxes; we use them every night on our boats at supper; we like them; have seen them put up at the factories here, and have bought them, know-

ing what they were, and like them ; I have seen as high as fifteen bushels of good fish in a boat going to the factory to be ground up ; I use them to salt for winter ; I ordered one hundred this fall ; I like them better than any other fish ; I used to be in the shad business, and would rather have the menhaden salted than the shad.

JAMES E. HUBBS.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

Lewis B. Morris, residence, Port Monmouth, aged forty-eight, business, fisherman, sworn—

The fishing has been decreasing for years ; when I was a boy we could catch more than we wanted ; the decrease has been for the last fifteen years ; I think, principally, because of the purse nets by the steamers ; the steamers come in our bay here and take up a load or two, and the good fishing is all gone for a week or so ; the steamers can go at any time and scoop up all the menhaden, while the sailing vessels lay becalmed ; the most of the steamers are foreigners ; think the bunkers spawn all the way along the coast ; I think the pursing of the menhaden, during spawning season, is an injury, and a law stopping it then would do good ; we have no Fish Warden here, that I remember ; would recommend that some responsible person should have charge of the fishing of the whole State, with power to employ others at any other time to assist him ; don't think I usually see spawn in menhaden till October ; it is impossible to lay around a school of menhaden and the other fish in the school get away ; there would always be plenty of fish if the menhaden fishermen were restricted as to time and size of mesh ; think the menhaden a good fish to eat ; the average price to salt is \$1.50 per hundred ; I expect to have one fried for my supper.

L. B. MORRIS.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

D. W. Vannote, residing at Port Monmouth, aged forty-seven, business, fishing, sworn—

Been fishing about fifteen years ; have fished with purse nets for two years once ; during that fifteen years the fish has decreased and are smaller this year than ever before ; about fifteen years ago

we could load one hundred thousand at a set ; now they do well if they catch ten or fifteen thousand at a set ; think the decline is because they are caught up by steam rigs ; I have counted as high as fifteen in our bay here ; I think they cause the decrease in other fishing ; I have caught as high as fifty bushels of weakfish at a lift in a pound ; now I think I have a good lift if I get five bushel ; I don't like menhaden myself ; they are a little too rich for me—too oily ; I think they spawn here ; I have caught them here early in spring in such condition that they must necessarily spawn here ; we also see small bunkers from an inch up, come down from the rivers in the fall ; think a three-mile law by steamers would be good ; never noticed the fish to diminish until after the steamers came here ; know that years ago the wagons came from back in the country to get loads of menhaden to salt down ; that was when I was young and lived in Ocean county ; I think they should not be caught during spawning season ; think if the United States was to allow the State to have control three miles out it would be a good thing ; there should be a head to the department, with power and means to enforce it ; the present law is a dead letter ; last year New York passed a law stopping them from fishing off the coast, and when they enforced it on shore of Kings county the steamers all came over here ; the net takes all they lay around ; one purse net caught, last week, one hundred and twenty bushels of weakfish and sold them to Bill Derby for twenty cents per bushel (takes about sixty-five weakfish to make a bushel) ; they are using as small as one-and-three-quarter-inch mesh this year ; there are no purse nets owned in this county ; they mostly come from Long Island.

D. VANNOTE.

Sworn and subscribed before me.

E. G. HARRISON,

Notary Public.

Walter M. Secor, residence, Port Monmouth, aged fifty, business, pickles, formerly had fish pound, sworn—

Formerly put up menhaden to eat, in small cans and boxes, and labeled them first as American Sardines ; there was a good demand for it ; the owners of the factory made \$15,000 the second year ; know that the menhaden has been peddled at \$1.50 per hundred ; we used, in our pound, to usually catch fifty to sixty bushels of weakfish at a lift, now they can't get more than five or six bushels at a lift ;

think the steamers the cause of the decrease ; have seen as high as twenty-five within a mile of my pound, which I think an injury to the fishing ; think they spawn up the bay ; have seen spawn in the menhaden in the early fall ; think a law should prohibit the catching during spawning season ; think some head should have charge of the business.

WALTER SECOR.

Sworn and subscribed before me.

E. G. HARRISON,
Notary Public.

BRIGANTINE BEACH, N. J., Nov. 14th, 1888.

Capt. William Holdzskom, being duly sworn according to law, doth depose and say—

I reside at Brigantine Beach, and am fifty-five years of age, and my occupation is fishing and oystering, and baying generally.

Q. Do you know anything about the menhaden steamers and fishermen ?

A. Yes ; I have been to them, and seen them catching bluefish and weakfish, and putting them on board the sail vessels in the business ; I have seen steam vessels within two hundred yards of the beach fishing with purse nets, and they, the said menhaden steamers, load the steamers all they could carry, and caught good fish or food fish at the same time, as I see them sorting them out.

Q. Do you think that the menhaden men can catch menhaden without catching food fish ?

A. I do not, if the food fish are there ; provided their nets go to the bottom.

Q. Do you believe the menhaden fishing detrimental to the hook-and-line-fishing inside of the inlets, and bays and rivers ?

A. In the summer time I do.

Q. Would you change the present law in regard to prohibiting net-fishing, which is in June, July and August, now ?

A. Yes.

Q. How ?

A. Why, because it would protect spawn fish by adding the month of May, making it four months instead of three months.

Q. Do you think it is detrimental to the general fishing interest to fish with less than a three-inch mesh net ?

A. I do.

Q. Do you think pounds and set nets detrimental to the general fishing interest?

A. I do.

Q. Where do you think the menhaden spawn?

A. I think they spawn inside the inlets, bays and rivers, by them coming in during the spawning season with other species of fish.

Q. Do you consider drumfish and menhaden fish a good food fish?

A. I do.

Q. Do you consider hauling seines in the summer time detrimental to the hook-and-line fishing?

A. I do.

Q. Do you think hook-and-line fishing brings more money to the people in general than shad haul seines?

A. I do.

Q. Do you think that it would improve the general fishing interests in New Jersey provided there was a law to prohibit the menhaden steamers or other vessels from fishing within three miles of beach or shore?

A. I do.

Q. Will you attest to the above?

A. I will.

WILLIAM HOLDZSKOM.

NOTE.—Capt. Holdzskom is keeper of the life-saving station on Brigantine Beach, N. J., and I consider his testimony equal to one hundred others.

THOMAS E. FRENCH.

LEEDS POINT, N. J., November 15th, 1888.

John H. Anderson, being duly sworn according to law, doth depose and say—

I reside at Leeds Point, Atlantic county, N. J., and I am fifty-five years of age, and my occupation is farming and hotel-keeping.

Q. Do you know anything about menhaden fishing?

A. Yes.

Q. Do think the menhaden fishing steamers detrimental to the general food fishing interest?

A. Yes; I do.

Q. Would you favor a law to prohibit the menhaden steamers from fishing within three miles of coast or beach?

A. Yes; I would.

Q. Do you consider drum and menhaden fish a food fish?

A. I do.

Q. Do you know of the menhaden fishermen catching or taking any other fish except menhaden?

A. I do.

Q. Of what amount?

A. I saw five hundred drumfish boiled and put into a fertilizer factory; into the scrap heap in their warehouse.

Q. What time of the year would you prohibit net-fishing in the bays and rivers, for the better protection of the spawn fish?

A. From the 15th of May until the 1st of July each and every year.

Q. Would you favor a law to prohibit all seines from fishing with less than a three-inch mesh net?

A. I would.

Q. Does any food fish, such as bluefish, weakfish, or any other fish, feed on menhaden?

A. They do.

Q. What kind?

A. Bluefish and weakfish.

Q. Did you ever find any menhaden inside of any food fish?

A. I have.

Q. How many?

A. I once opened one hundred and thirty large weakfish and each one had inside each of them an average size or full grown menhaden fish, and I caught these weakfish myself, and the one hundred and thirty weakfish weighed five hundred and thirty pounds.

Q. Do you consider the hauling of seines after the 1st of July, detrimental to the welfare of the inhabitants or people in general?

A. I do not.

Q. Which do you think of the most benefit to the inhabitants or people at large, or which brings the most money into the neighborhood, haul seines or hook and line in the summer time?

A. The nets bring in double the revenue to that of the hook-and-line fisherman.

Q. When do you think menhaden spawn, and what time of the year?

A. I don't know.

J. H. ANDERSON.

NOTE.—Capt. Anderson owns a hotel and farm, and used to have a net, and a net is his idol, and he is mighty well posted up, too, but he is much mistaken about the revenue of nets in the summer time.

T. E. FRENCH.

Richard Sooy, being duly sworn according to law, doth depose and say—

I reside at Leeds Point, and I am sixty-seven years of age, and my occupation is baying, and fishing is my main business.

Q. Do you know anything about the menhaden fishermen?

A. I do.

Q. Do you consider the menhaden steamers and their fishermen detrimental to all other fishermen that fish for food fish?

A. I do.

Q. Why?

A. Because before these menhaden fishermen came here I could go out here in the bay and inlet and make one haul or two and load my boat; now since they, the steamers, came here with purse nets, when I go out all night and make six or eight hauls, and oftentimes will not get one hundred pounds all night.

Q. Do you consider menhaden a food fish when they are fat?

A. Yes.

Q. Does other fish feed on menhaden, and what kind?

A. Weakfish does, I know.

Q. Did you ever take whole menhaden out of weakfish?

A. Yes; many a one.

Q. Do you consider it would be a great benefit to the general fishing interest to haul seine and hook and line, if there was a law to prohibit the menhaden steamers from fishing three miles off the beach or coast?

A. Yes.

Q. What time of the year would you prohibit haul seines from fishing, to protect spawn fish?

A. If it were not for the menhaden fishermen we would not want any other protection.

Q. What is the least size of mesh should be used?

A. Not less than two inches and a half.

Q. Where do you think menhaden spawn?

A. In the bays, rivers and creeks.

Q. If there is to be a law passed for the protection of spawn fish, what time of the year do you think all nets should be prohibited from fishing?

A. From the 15th of May to the 1st day of July.

Q. Do you think pound and set nets in the bays and inlets detrimental to the general fishing interests?

A. I do.

Q. Have you anything to offer for better protection of the fishing interests?

A. I have not more than I have stated; I attest to the above by signing my name below.

RICHARD SOOY.

I, *John Doughty*, being duly sworn according to law, doth depose and say that I reside at Leeds Point, Atlantic county, N. J., and I am forty-nine years of age, and my occupation is a fisherman and bayman, and have always followed it, and I have heard and read all of Mr. Richard Sooy's evidence and testimony, and I affirm every word and syllable spoken by Mr. Richard Sooy, as we mostly fish in copartnership, and I have nothing to add or nothing in the above to contradict, and here sign my name in the presence of J. H. Anderson.

His
JOHN X DOUGHTY.
mark.

Before Thomas E. French, one of the Fish Commissioners.

ATLANTIC CITY, N. J., November 16th, 1888.

Benjamin D. Sooy, being duly sworn according to law, doth depose and say—

I reside at Atlantic City N. J., and I am thirty-two years of age, and my occupation is yachting, fishing.

Q. Do you know anything about the menhaden steamers' fishing?

A. I have been on board of them, when I saw a great many food fish of different kinds amongst the menhaden; I saw at one time when they must have pursed up a ton and a half of weakfish, and I

also saw many dead fish floating away on the top of the water, and no one to gather them up.

Q. Do you think that it would be a general benefit to the hook and line and haul seines in the inlets and bays if there was a law to prohibit the menhaden steamers, with purse nets, from fishing within three miles of the beach or coast?

A. I do.

Q. Do you then think the present fish law, prohibiting the fishing in the bays, inlets and rivers, which is June, July and August, should be changed?

A. I do not.

Q. Do you consider menhaden fish a food or eatable fish?

A. I do.

Q. Are menhaden a good bait for other food fish; if so, what kinds?

A. Yes; such as striped bass, sea bass, bluefish, weakfish and red drumfish; in my experience, menhaden are, in general, as the best bait, and that we use.

His
BENJAMIN X SOOY.
mark.

In the presence of Thomas E. French, one of the Commissioners.

NOTE.—Benjamin D. Sooy is Matthew Quay's (United States Senator) boss fisherman here at Atlantic City, N. J.

Benjamin F. Crammer, being duly sworn according to law, doth depose and say—

I reside at Linwood, Atlantic county, N. J., and I am thirty-seven years of age, and my occupation is yachting and fishing in general.

Q. You have been interested in the menhaden business on sail and steamers with purse nets a number of years in the past?

A. Yes, sir.

Q. Were you ever a stockholder in a fish factory?

A. I was.

Q. Was it a paying business?

A. It was not.

Q. Where was this factory that you owned stock?

A. Near Great Egg Harbor inlet; the name of it was The Morris Oil and Guano Company.

Q. Did you lose much?

A. I put \$1,000 into the factory, and lost it.

Q. Did you ever catch any food fish—such as bluefish, weakfish and drumfish—when you were fishing for menhaden fish?

A. I have caught all of these, but not any great quantity at one time.

Q. Do you think the menhaden steamfishing on or along the coast of New Jersey detrimental to the hook and line and haul seines fishing inside of the inlets, bays and rivers?

A. I do not think it does much detriment.

Q. When do you think menhaden spawn?

A. I am not well enough posted to answer that question properly.

Q. Would you change the present law which prohibits fishing with all seines during the months of June, July and August, in the bays and rivers of Little Egg Harbor and the other waters?

A. I would not.

Q. Do you think there should be a law to prohibit all seines from being used with less than a three-inch mesh nets in the inlet, bays and rivers in the summer or winter time?

A. I do, undoubtedly.

Q. Do you consider that set nets, pound nets, fyke nets detrimental to the general fishing interest when they are used in the spring and summer time during the spawning season, in the bays and rivers inside of the coast or beach?

A. I certainly do so consider it very damaging to it.

Q. Do you consider menhaden a food fish?

A. I have eaten them myself, and have sold them to others for food.

Q. Don't you think if there were a law to prohibit the menhaden vessels from fishing within three miles of the coast or beach it would be a general benefit to the interest of the fishermen on the inside waters—bays, rivers?

A. I consider it would be a great damage to the interest of the menhaden fishermen themselves if there were such a law put in force.

Q. Which is the cause of the most benefit or that brings the most money into the watering places along the coast of New Jersey, haul seines or hook and line, in the bays and rivers and its branches?

A. I consider the sporting men employing yachts and hook-and-line fishermen, and other hook-and-line fishing men, fishing for dif-

ferent markets, overbalances the nets a number of times over.

Q. Do you know of anything more about the destruction of fish ?

A. Yes ; I know of a lot of drumfish cooked up in the fish factory—about twenty tons—but no other food fish of any amount.

Q. Is a drumfish a food fish ?

A. I know of some that consider them good food.

B. F. CRAMER.

Capt. Francis H. Ducasse, being^d duly sworn according to law, doth depose and say—

Am forty-four, or nearly forty-four, years of age, and my occupation is yachting and fishing.

Q. Do you know, of your own knowledge, anything about the menhaden steamers taking of food fish with their purse nets ?

A. I do ; I have been alongside of them and seen them scooping up the menhaden fish and weak and bluefish at the same time and putting them into the hold of the steamer, and I asked them if they would sell me some of the food fish, and they said if I could get them out myself ; so I got eighty-three of the bluefish while they were scooping up the menhaden fish, and I am satisfied that I did not get one out of twenty of what I saw going in the hold ; I do think I could have loaded my yacht with food fish if I could have got all they caught that day, but I only took bluefish, as I wanted the best ; I have a number of times gone alongside of them and got food fish. but I have to get them out myself, as they, the menhademen, will not take the time to sift, or cull, or sort them out for me ; I always paid for them.

Q. What else do you know ?

A. I have seen many drumfish floating around dead on the water, and on the beach, which had been dumped out of their purse nets after they had loaded their vessels or steamers ; this was in 1887, when they destroyed the drumfish so.

Q. Do you know that menhaden is best food fish ?

A. I eat them myself, and I have sold them for food fish, fresh and salt.

Q. Do you think that an eel spawns ?

A. I do think that an eel spawns same as any other fish.

FRANCIS H. DUCASSE.

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