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**A memorial
relating to the
destruction of
state fisheries
presented to ...**

Maine.

**Commission of
Sea and Shore ...**

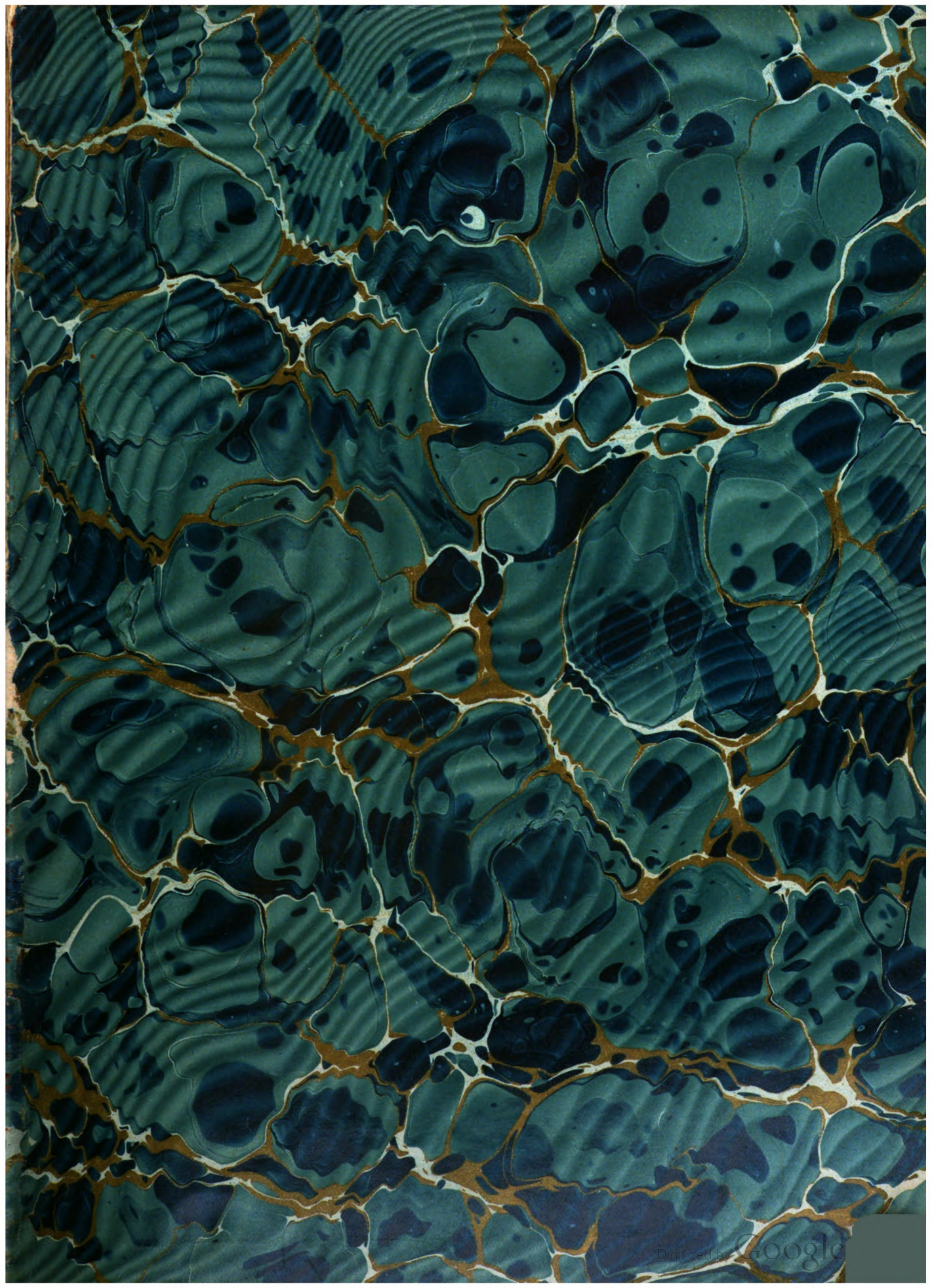
WISH VS. THE WIND SOUTH.



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A MEMORIAL

RELATING TO

THE DESTRUCTION OF STATE FISHERIES

Presented to Congress

ON

MARCH 9, 1892,

BY THE

Commission of Sea and Shore Fisheries

OF THE STATE OF MAINE.

In Opposition to the "Lapham Bill" (H. R. 5030) Permitting the Use
of Purse Seines in the Menhaden and Mackerel Fisheries
Contrary to State Laws.

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In Opposition to the "Lapham Bill" (H. R. 5030) Permitting the Use of Purse Seines in the Menhaden and Mackerel Fisheries Contrary to State Laws.

To the Honorable Senate and House of Representatives in Congress assembled:

The State of Maine, by its Commission of Sea and Shore Fisheries, desires to enter a respectful but most emphatic protest against the passage of the so-called "Lapham Bill" (H. R. 5030), now pending before the Honorable House Committee of Merchant Marine and Fisheries. While insisting and relying upon the fact that such legislation as proposed would be absolutely contrary to the letter and spirit of the Constitution of the United States, and a most dangerous invasion of certain of the long established and dearly cherished rights of the several States, it still seems fitting that Maine should be heard in unequivocal remonstrance against the propriety and advantage of such a law as is proposed for the consideration of your Honorable Bodies.

The petitions and remonstrances which are daily pouring in from all classes of our people, more particularly those residing upon our coasts, indicate, in part, the intense interest which is felt in this matter and the lively alarm with which the passage of such a law is universally regarded. Our legislature is not in session. But it is not too much to assert with confidence that resolutions similar to those which have passed the legislature of Massachusetts would readily receive the substantially unanimous assent of our Representatives and Senators. Such a feeling as this is entirely justified by the magnitude of the stake which our State has in the preservation of her fisheries. The gentlemen who have appeared before the

Honorable Committee of Merchant Marine and Fisheries have represented, by comparatively few men, millions of capital wielded with the easy flexibility with which the organization of the United States Menhaden Oil and Guano Association enables a few men to handle it. The Commission of Sea and Shore Fisheries feels itself charged with the conservation of interests, which, while largely exceeding in aggregate money value the assets of this Association, are those of people so numerous and often of such humble circumstances as to preclude their representation at this distant Capital of the Nation except by the chosen officers of their State. It is for these interests that the Commission desires to speak.

It would wish to present the cause, in the first place, of thousands of hardy boatmen or fishermen of our coast. Each of these men, as a rule, has invested a very large portion of his little all in a boat, weir or other apparatus, of an average value of between one hundred and five hundred dollars. For these men, such legislation as that proposed by the "Lapham Bill" would strike down the strong arm of their State, which is raised, as it were, to defend them against a most merciless and crushing competition by combined capital, against whose improved methods and gigantic appliances the simple energies and rude devices of the average poor fisherman leave him helpless and hopeless. Against a fleet of seventy steamers, each operating two seines, both of the average length of between 1,500 and 1,800 feet, and usually 100 feet deep, operated four or five times each day by large crews with the aid of steam gear, from vessels capable of going in any direction and in any weather, but small chance is usually afforded the hardy fisherman, relying upon his little boat and small seine, and largely controlled in the use of both, in a dangerous calling, by the stress of weather. Should it appear that the improved methods are needful and useful, and of no injury to the fish supply, our fishermen might be forced to yield. But for the care of these men, among her most valued citizens, our State has always shown extreme solicitude, and the force of facts which would crush so splendid a race of men should receive careful scrutiny. It is respectfully submitted that the Nation has a manifest interest in the welfare of this class of men. It may well be doubted whether any equal number of men are equally available in case of need for the merchant or naval service of the United States. Hardy, fearless, inured to hardship and accustomed to brave the elements at all seasons, they are an ideal body of men, particularly fitted by their lifelong training for the service of our Navy. They are essentially a generous class of men who do not wish any law enacted to discriminate in their favor, but who desire to have all citizens of the United States share with them, all being treated alike and subject to the same restrictions.

It is among the humorous contentions of the Guano Association that their fleet is a nursery for American seamen. Their fleet, on the contrary, is largely manned by foreigners of all kinds, while their pilots and responsible men are in many instances resident in Maine and taken from the ranks of the rugged Maine fishermen.

An interest, much larger numerically, for which our Commission desires to speak, is that of the fish-food supply of the people. The marketmen and the seiners; the guano makers and oil extractors, have procured for themselves adequate representation. What shall be said of the thousands of humble homes into which food fish comes almost "without money and without price," as the result of the personal exertions of the family? Good fishing means not only prosperity to our boatmen; it means a plentiful supply of nutritious food to poverty and low estate. It means that the earnings of thousands of industrious poor are largely augmented. Of such blessings no statistics are or can be procured. But to the wise and thoughtful care of your Honorable Bodies it may well be commended for consideration and the suggestion offered that the citizens of any of our seashore States are, by natural equity, entitled to a reasonable supply of that abundant and nutritious food that nature has placed at their doors without danger of extermination by the citizens and for the enrichment of capital in other States.

Of the obvious considerations of the general food supply, it is unnecessary to speak. It is not too much to insist that these gifts of a wise Providence shall not be made into commercial products until it is demonstrated beyond question that they are not thereby prevented from serving a nobler, and, perhaps, their original purpose. It will also be unnecessary to call attention to the fact that preservation of the fisheries for a food supply cannot operate to benefit our own particular State without benefiting all other States in practically the same degree. Not only are our fresh fish distributed to most places within forty-eight hours of our coast—which, with the improvement of transportation and refrigeration, means a constantly widening area—but our great canning industries place at the very doors of all our countrymen the results of the wise preservation of natural bounties which our State laws enable us to make. If it were constitutionally lawful to place control of local fisheries in other hands than ours, it is extremely doubtful whether anything but loss could possibly follow to the citizens of the inland States. Such are the conditions of the problem.

Nor has this Commission forgotten another incidental and yet most valuable advantage to our State and Nation which it cannot, in the full discharge of its duty, fail to represent. Large portions of certain sections of our State are owned by residents of other States. There are immense investments of property placed upon our soil by people from all sections of this country, who visit our State during certain seasons of the year. These men not only furnish welcome employment to great numbers of our citizens, but by increasing the valuation of our towns, gratefully reduce the burden of taxation to thousands of our people. It is said, derisively, that these persons visit us for sport. By all recognized standards such a statement, we submit, is not only false but immaterial. The sportsman does not waste the gifts of nature. He uses them according to the intention of the Giver, and, with his fellows, and, always in strict obedience to the law, enjoys the cheap abundance of our bays and rivers. But the sportsman is but a trifling

element in this new and great prosperity with which our State is blessed. To the tired man of business, exhausted with the terrible strain of commercial life; to the professional man, seeking the relaxation of a vacation; to the invalid; to the man of moderate means and his little family to whom the cheapness of fish food is often an indispensable inducement, the beautiful scenery and exhilarating climate of our State offer the draught of health and recreation. The sea-coast is the breathing place and sanitarium of the entire country. It cannot be extended. With the growing prosperity furnishing the means, and the growing mental strain furnishing the necessity, it cannot be doubted that more and more people each year must recuperate their health on the Atlantic coasts, carrying back to their several homes the beneficial energy so acquired. Such a consideration is of too great National importance to escape the attention of your Honorable Bodies. To all this great and growing tide of immigration the cheap fish-food supply is of immense importance. Until the health of our people becomes a matter of general indifference, the considerations so scantily presented will continue to merit your careful attention.

On the whole matter, the statement made by Mr. William F. Brown, of New Jersey, to the Senate Committee of the First Session of the 48th Congress, Report No. 706, accompanying Senate Bill No. 155, for the protection of the coasts of New Jersey against foreign fishermen, p. 80, concerning the fishermen of New Jersey, is entirely true as regards those of Maine:

“The question of fishing for menhaden by steamers with shirred or purse seines is agitating the people of the State of New Jersey generally, as well it ought. Scores of steamers during the fishing season, owned and manned by non-residents of the State, can be counted daily along the coast, whose business it is to catch these fish, and with these also the better grades of fish, and manufacture them for mechanical and fertilizing purposes. This wanton destruction of what is designed by a beneficent Creator for the food and sustenance of man has been prosecuted to such an extent that the occupation of many of our citizens is being destroyed, while the increasing demand for this desirable food and luxury is being constantly diminished, and that by non-residents of the State. Under these circumstances, and the continued persistence in their business by the parties I refer to, it can readily be seen that the period of time is near when not only the people along the seaboard will be deprived of these long enjoyed natural rights and franchises, but these outside and foreign fish marauders will destroy their own (to our minds) illegitimate occupation.

“In referring to the statement of Senator Sewell to the senate of New Jersey, I can only say it expresses the facts in the case. I quote from his letter. He says:

“The evil is a crying one, and must be suppressed by the best means at hand. The growing popular interest in the shore line of our State, and its magnificent summer resorts, have really brought this question up as one of the principal industries of New Jersey, from which we receive a revenue equal to, if not in excess of, that from our manufacturing interests.”

“It will not be regarded as underrating or undervaluing the knowledge of

gentlemen who possibly may be better acquainted with this question than ourselves if I present for consideration some of the evils with which our fishermen are obliged to contend.

“The first thing we find confronting us is organized capital, to the amount of millions of dollars, against unorganized and poor fishermen along our coast, with *no* pecuniary ability or capital at their command with which to meet it. It is well known that they have counsel employed, and a strong lobby, backed by wealthy capitalists, at work upon the New Jersey legislature, and this clearly demonstrates what they may be expected to do at Washington. This, it will be admitted, poor fishermen are not prepared to contend with, and therefore need the protection it is in the power of Congress to grant.

“This capital invested in the menhaden steamers and the apparatus connected with them is an insurmountable obstacle in the way of our shore fishermen’s success. The latter, with their simple machinery of row boats and seines, cannot compete with the steamer fishermen. It is only necessary for us to compare the two methods of fishing to see that, with these obstacles, our fishermen have no chance whatever. A school may be in sight—the shore fisherman with boat and seine ready to push into the sea is at once defeated and mocked, while the steamer with her lookout at mast-head steams within proper distance, the small boat is pushed off, the school is surrounded with the purse seine, and in a few minutes scooped into the hold of the vessel, while our shore fishermen look on, only to be laughed at.

“The question then recurs, does the amount of revenue or income accruing from the steamer fishing exceed that in the aggregate which is or may be derived from the labors of our own fishermen? It may be difficult to determine this question, but granting for the argument’s sake that it is in favor of the steamer men (which we are not prepared to believe), does that argue that protection and favor should be given to capital—afforded the rich as against the poor? No such proposition as this, it seems to me, would be reasonable, just or right.

“A reason given in favor of the menhaden fishermen is, that the menhaden, or moss-bunkers, are, like wild geese, migratory, and therefore should be caught and utilized when opportunity is afforded. This is a recognized fact by our own fishermen. If the argument holds good for the steamer men, does not the same argument apply to fishermen on shore? Or, is there not a good reason here why Jersey fishermen should be protected, and enjoy the benefit of what a kind nature or Providence sends to their shores? The steamer fishers may follow up the fish. The Jersey fishermen cannot. I may be permitted to say that this idea of migration is known to hold good in relation to other fish—the striped bass, the bluefish, the codfish, etc. But we are told when asking protection that there is no diminution of the fish, and that therefore protection is not demanded.

“This we are obliged to deny.”

This principle, that dwellers upon a certain coast are fairly entitled to insist upon preservation of the fish upon their respective borders sufficient to supply their demands for food and livelihood, is one which, we submit, should never be lost sight of in any candid examination of such a question. It is said, with some degree of elaboration, by those who desire to employ steam and machinery for catching fish that their cause is that of advancing civilization; that they represent

improvement and progress; that their apparatus, as compared to that of the humbler fishermen, resembles the modern horse-rake as compared to an ancient hand-rake. Such reasoning, when applied to the harvest of the sea, contains an obvious fallacy. The farmer who rakes hay with a modern horse-rake, rakes his own hay. His less fortunate neighbor with the old hand-rake, does the same. Any reduction of price or saving of time through the use of better apparatus is to be applauded. But in dealing with this harvest of the ocean, all men are operating upon a common property in which their rights and the rights of thousands of others are precisely equal and should be so preserved. It is, as it were, a field, limited in area, on which a crop of hay is growing, the common property of thousands, essential, not only to them, but also, directly or indirectly, to millions of others. If raked with the hand-rake, the share of all interested is nearly equal and general prosperity ensues. The raking spares the grass, which year by year maintains unimpaired its quantity and quality, serving in full measure all the objects of its greatest value. Into that field comes one man, with no greater rights in any particular than his fellows, who, by reason of the improved apparatus which his money enables him to buy, secures to himself the shares of thousands of his fellow owners—thereby reducing them to poverty and distress. He crops so closely as to tear up the roots of the grass and permanently destroy or seriously impair the crops of the future. Instead of using the hay for its original purpose and thereby benefiting millions, he burns it, we may suppose, for its fertilizing property and puts the money in his pocket. Having destroyed the field, is it quite a sufficient answer, as he goes to another into which his victims cannot carry their feebler energies and where he will repeat the same process, that he should call attention to the perfection of his apparatus, the number of his employees or the size of his profits? Shall nothing be said of the now barren field and the province whose revenues have been wrung from their rightful owners to swell an individual fortune?

In the Report of the Condition of the Sea Fisheries (2d session, 42d Congress, Misc. Doc. 61, p. 101), a writer says :

“I marvel at the presumption of those who, in derogation of every other man's right, stand boldly before the law-makers of the land, and ask to be protected in their unlawful business, or not hindered in pursuing it. Is it not a matter of surprise that these men should go before these legislative committees and parade the extent of their plunder as a justification of the robbery itself? See the hundreds of thousands of barrels of fish which they testified annually to have taken in their traps for market at home and abroad, for fertilizing phosphates, for bait for the mackerel and cod fisheries, the profits of which they pocketed and to which they had no legal or moral right if their modes of fishing deprived the poorer fishermen of what was legally and morally theirs. There can be little doubt remaining that these novel modes of fishing stop the fish from going into their accustomed waters to spawn; that they prevent their going, as was their wont, into

the bays and rivers, and that they thus prevent those who live upon the banks of these waters from taking the fish as they formerly did, or compel them to longer voyages and to more expensive apparatus.

“How many hook and line fishermen, equally as worthy as those who have lain down to rest in a Newfoundland fog, have been thrown out of employment by the greed of the trappers in their unconscionable, everlasting hunt after that ‘last dollar,’ and lain down to rest in as gloomy a solitude in the fog of New England.”

In the Report of Committee of Rhode Island Legislature, June 15, 1870 (Misc. Doc. 61, 2d Sess. 42d Cong., p. 104), the Committee say :

“It should always be borne in mind that the fisheries have, from the time of the charter of Charles II. down to this present time, been considered deserving of recognition and special regard. The right of fishing belonged to each individual, and he could not, and ought not to, use it so as to infringe upon or destroy the right of another. Now, it is of the alleged violation of this individual right, and of a common, but sound, principle of law as well as of morals . . . that the people on the inland waters of the State complain.”

Before the Rhode Island Committee, Mr. C. H. Bassett testified as follows :

“For a fortnight past I have fished nearly every morning for two or three hours on Barrington bridge, and have conversed with a great many carpenters, shoemakers and other workmen who came to the bridge to catch a few tautog, if possible, for a dinner before going to their day’s work ; they say formerly they were able (when scup and fish were plenty) to come down here and catch all the fish they wanted before they went to their day’s work. They all tell one story. Before the traps were allowed there were plenty of fish ; could catch enough in half an hour. One very intelligent man thought it made one hundred dollars difference in the cost of living to those persons living on the shore and in the small towns on the bay, and, from my own experience, I have no doubt there are a thousand persons living near the shore to whom it would make this difference, amounting to a loss to them amounting to one hundred thousand dollars each year, the loss in the high price of fish in Providence market not being taken into account.”

The statement of the Committee is :

“It appears to the Committee that some legislative restraint, as to the use of new instrumentalities for fishing which impair or destroy individual rights, should be provided and enforced. . . . Mechanics, and other respectable persons, who, by a cast of the hook and line, could, without interfering with their regular duties and employments, add a dish to their frugal tables, have not the same chance as heretofore. It is in evidence that in certain localities boat-building was quite abandoned ; that parties did not visit Narraganset Pier, Stone Bridge and other watering-places, or soon left them because the attraction of fishing was wanting, and that this was attended by the depreciation of real and other property.”

The proper feeling as to this matter seems clearly stated by a distinguished ex-President of the United States. At a meeting held in Bourne, Mass., August 3, 1891, to take steps for preserving the fisheries of Buzzard's Bay, ex-President Grover Cleveland is reported to have said :

"In the first place, it is conceded, I believe, that Buzzard's Bay forms a nursery or spawning ground for the fish. Now, the protection of the fish in that place is only in accordance with the enlightened procedure which has been going on for years in every State of the Union, and there is no reason under Heaven why it should not be eminently a proper thing to do here in Buzzard's Bay.

"Next, we locally have a great interest in this subject, and we therefore should speak in favor of it. Of course, the means which are used for the destruction of fish at present, in some places within our waters, are such as to lead to the entire deprivation of the sport which attends the capture of them in a proper and decent manner. I am not in favor of resting this question entirely upon the basis of gratification to those who want to catch fish for sport. Indeed, I do not believe that fish should be caught entirely for sport. It is a recreation which I enjoy probably as much as any man in the world, but I never yet have been willing to catch fish for sport and have them wasted.

"Now, you will understand, of course, that the sporting element which enters into the consideration of this subject is somewhat related to your prosperity here, and the value of the fish as food is also important to more than those who catch them and couple with the catching of them recreation. Every single one of you who resides here is entitled to such a preservation of the fish on your borders as will enable you to secure all you desire for food, and you are prevented from that by the means which we seek to do away with."

The peculiar value of a statement from this gentleman seems to have been fairly put by another speaker at the same meeting :

"It is a favorite and ingenious device of our friends the enemy to state, or perhaps rather misstate, that this is an attempt on the part of the rich to antagonize the great masses of the people ; that this is a matter on which the kid-gloved sportsmen of our cities are endeavoring to secure legislation, which is inimical to the true interests of the general masses of the people. And this has been effective with our legislators. But no man, legislator or common citizen, can be so ignorant or so indifferent as to fail to recognize in your presence with us, to-night, sir, an absolutely sufficient guaranty that this movement is a movement in the interest of the many, in the interest of all the people, and tending toward that democratic equality of privilege of which you are personally, if you will permit me to say so, the distinct exponent and embodiment."

Advantage has been taken of distance by certain irresponsible persons, largely those who have violated our laws, to misrepresent the fishery laws of our State and their administration by our wardens. It is hardly necessary to say that our laws are reasonable laws, the outcome of practical experience covering a period of many years and apply equally to residents and non-residents. They are framed

in the interest of the masses and not in those of any monopoly, either in the State or out. They are adapted to the peculiar conditions existing on our coast. We submit as a self-evident proposition, that a general National law applying to the entire Atlantic and Pacific seacoasts and to the coast of Alaska, could not, in the nature of things, to equal advantage, meet the requirements of the situation. The variations of climate and other conditions are too great to make such a supposition possible.

A statement by Col. W. H. Fogler, of Rockland, a leading attorney of Maine, gives the facts fairly :

“It will thus be seen, with the exception of the period from 1871 to 1878, it has been since 1843 the fixed policy of the legislature of this State to preserve these fisheries, and the change of the statute between 1871 and 1878 was brought about by the efforts of the large operators, who employed the ablest counsel and used all the influence they could possibly bring to bear.

“They now contend that these operations were not prejudicial to the interests of the shore fishermen, and that the pursuing and wholesale slaughter of menhaden and mackerel prior to 1878 was not the cause of the departure that year.

“There can be no doubt that the presence and operations of a fleet of porgy and mackerel seiners in every bay, harbor and inlet which these fish frequent is disastrous to all kinds of shore fisheries. It is impossible for fishermen in small boats to pursue their vocation successfully under such conditions.

“Last winter only one week intervened between the giving of notices upon the petitions for the repeal of the statute and the time of final hearing, and yet in that time remonstrances from the shore towns and islands were presented signed by over 4,000 remonstrants. When it is borne in mind that many of the remote shore towns and the larger number of islands could not be reached in that time named, it is easy to see what the fishermen themselves think of this matter.

“It is claimed by the opponents of our statutes that the fact that the product of the porgy fisheries did not fall off in the years prior to 1878, shows that the absence of these fish from our coast was sudden, depending upon some other cause, such as an absence of proper food. An examination of the statistics will disclose that while the product was kept up from year to year, it was so kept by reason of an increase of steam vessels and appliances year after year, indicating that there was a constantly diminishing supply of fish.

“Again, menhaden and mackerel and shad disappeared at the same time. The food of each of these species of fish are unlike. It would be a remarkable coincidence if the food of each species should disappear from our coast at the same time.

“It is a fact that the porgy seiners took large quantities of shad with the porgies, especially in the waters about the Kennebec. The shore fisheries are of great importance to the people of this State, especially the poor fishermen who fish in boats.”

The fish wardens of Maine need no defense. It is perhaps rather a credit to their diligence than otherwise that they are not fully satisfactory to all the wit-

nesses who have appeared before the Honorable Committee of the House. A laborious effort has been made to show that these officers are an unscrupulous, irresponsible, dishonest class of men, for whose benefit the State laws are especially enacted. It is perhaps obvious that this is an unqualified falsehood, published to bring the laws and State officers of Maine into discredit and reflect in an unjust and cruel manner on the wardens primarily, and secondarily on the executive officers and citizens who are responsible for the appointment of the wardens. These wardens, on the contrary, are selected in a most careful and painstaking manner. When the name of a citizen is put forward from any locality to receive the appointment of warden, first, before any recommendation on the subject, his district is personally visited by a member of the Commission and a personal interview held with the applicant. A report is then made. His credentials are examined by another member of the Commission, who in turn investigates from his standpoint. Then, if the applicant is favorably reported upon by the *majority of the entire Board of State Commissioners of Fish and Game*, the name goes to the Governor. He then directs such investigation as he may deem necessary, and after his nomination, the application goes before the council for confirmation. The probability of corruption or dishonesty in a man so chosen can be left with this statement of fact. These wardens are, on the contrary, a careful, thinking class of men as a rule, performing arduous and oftentimes dangerous duties for a very small pecuniary consideration.

The appropriation made by the State to be used by the Commission of Sea and Shore Fisheries each year is \$4,000, to pay the expenses of the entire force of wardens, their salaries and all other incidental expenditures connected with the office. There are now thirty wardens under control of the Commission, and should this entire amount be equally divided among them it would give the magnificent sum to each of \$11.11 per month for salary and expenses.

Each warden is furnished with blank reports, both daily and quarterly, to report to the Commissioner each and every case on the day of its occurrence, thus bringing every violation of our State fishery laws to his notice; and at the close of each quarter a full statement by each warden is made, accompanied by duplicate itemized receipts from the respective County Treasurers of the amount of fines that have been paid into the State during the said quarter by the convicted as the result of the warden's vigilance. The warden in no case receiving any part of the fines paid, from a monetary point of view the office of warden is not to be desired.

To one with any acquaintance with the subject of sea fisheries the arguments and alleged facts of the petitioners for this legislation are as "familiar as household words." Hardly a late session of Congress has passed without a presentation of this side of the case; no legislature of recent years in Maine or Massachusetts has failed to hear the same statements; no court for years has tried a case against

these men without listening to an extended presentation of their views. Their points are always few and simple. To them fish are of limitless fecundity, and no efforts of man can have any appreciable effect upon the result; they are controlled by laws of which no one knows anything, and appear and reappear at intervals and under circumstances which baffle the brain of man and suggest the conclusion that they should be caught and so added to the wealth of the community, whenever, wherever and however possible; that if this is not done they wander again into the limitless depths of the ocean and so are hopelessly lost to the world. It is part of this blind, helpless, but at the same time obviously profitable contention that all opposition to these conclusions is based upon ignorance or prejudice, and is usually done at the instigation of "sportsmen," or the venal motive of getting unholy profit from fines and forfeitures. As a supplement and corollary to these contentions it is further urged, so far as relates to the menhaden fisheries: (1) That they are not food for fish or fish for food. (2) That no food fish are caught, injured or disturbed by the use of purse seines in the menhaden fishery. (3) That menhaden spawn no one knows where and no one knows when, except presumably in the fall, and consequently no device of man can affect the increase and surplus. (4) That the absence or presence of menhaden has no effect on the abundance of food fishes.

It must be obvious from the fact that these contentions have yearly been submitted to our legislatures and almost yearly to Congress and the courts and that no action favorable to these contentions has taken place since the foundation of our Government, that another and on the whole more convincing side to this entire matter exists and has been followed. It is a side which does not fail of representation at our State capital, or before committees of Congress who visit localities affected. But it is one which, except to a limited degree, cannot be represented here. In an attempted discharge of its duty to those interests our Commission desires to say that each and every one of the contentions above stated is either entirely false in point of fact or is of such doubtful correctness as renders it unadvisable to follow it as a basis for affirmative action in so important a matter.

In direct contradiction to most of the facts presented and above set forth it is, in our opinion, established by the highest authority:

1. The fecundity of fish is not a defense against man's rapacity.
2. Fish obey laws such as to render protection essential.
3. Menhaden are a food fish.
4. Menhaden are food for fish.
5. Food fish other than menhaden are caught in menhaden fishing.
6. Menhaden fisheries can and do diminish the supply.

The Fecundity of Fish.

It is an unqualified rule that persons who take their profit in capture of fish or game either actually, or in unconscious self-defense, believe, or endeavor to believe, that the natural supply of the bounty of nature upon which they are operating is unlimited and extermination impossible. Probably the persons who made our buffalo a reminiscence thought that with the enormous herds on our prairies no hunting for skins could materially affect the supply. The men who practically exterminated the whale fishery may have felt that, in the power of the whale's escape into inaccessible depths, a refuge was provided which set a limit to the effects of their own energy. The Canadian seal fishers off the Aleutian Islands may feel a serene confidence that they are operating upon an unlimited field. It is the same old story. The buffalo is gone; the whale is disappearing; the seal fishery is threatened with destruction by pelagic killing of seals. Still Congress is asked to abrogate State fishery laws upon the theory that this idea of indestructibility is nevertheless true as to fish. Is it probable that nature is so capricious as to extend to one species a power of permanence denied to all others? It is urged that fish are essentially different from whales and seals or buffalo, which have but one at a birth, in that fish eggs are practically unlimited in number. This is of course true. If all eggs capable of being hatched of all fish species should reach maturity, and continue the process for a few years, the sea would be solid with its inmates. Why does it not? Evidently on account of the fact that while the calf of seal, buffalo or whale is not eaten by his parents or allied species, fish eggs become the prey of nature as soon as laid. With a carelessness consistent with the cold blood of the parent, the eggs of fish are deserted. They become at once not only the favorite food of their species but of all other fish; they are subject to the appetite of shell-fish and small fish who are diligent in devouring so tempting a dish. Abandoned in a treacherous element, with shifting sands and currents, impregnated in a careless and perfunctory manner by a fluid discharged into a diluting substance of infinite volume, waiting the change of temperature which may never come, the wonder is, not that more fish do not mature, but rather that any do. Even size in the growing fish is but a slight element of protection. His enemies remain constant in their assaults. In the silence of the water a tragedy of cannibalism is incessantly in progress. Many a fish will eat his own weight per day and devours every fish he can. In estimating the destructive agency of man it is simply misleading to overlook the obvious fact that it is only upon the remnant from which the supply must constantly be recruited that his energies are exerted. In that wise order of nature to which astonishment and admiration are given in exact proportion as its laws are learned, the supply of fish, each in turn feeding upon and furnishing food for others, is such that the balance is constant and the supply maintained. Even with the rude

devices of the Indians there is no evidence that the fish were more than plenty when our ancestors reached these shores. The processes of nature are the thoughts of God and they daily indicate the wisdom of the Architect of the Universe. Into this order, which has its own adjustments, the agency of man comes as a disturbing element, and when exerted during certain seasons : *e. g.*, that of spawning, his agency is capable of disastrous effect. Prof. Spencer F. Baird, in his Report of 1871 (Misc. Doc. No. 61, 2d Sess. 42d Congress, page 28), puts the matter admirably :

“ It is not a sufficient argument in reply to this (the danger of fish extermination) to point to the enormous number of eggs laid by a single fish in each season, amounting in some instances to perhaps from five thousand to hundreds of thousands, or even millions, since the immense fecundity is an absolute necessity to preserve the balance of life under water. The eggs and the young fish furnish the appointed food to an immense variety of animals, many species of fish as well as crustaceans and other animals depending entirely upon them for support. Among the particular enemies of the eggs and the young fry may be enumerated the small minnows, or cyprinodonts, the atherinas, silver sides or friars, the cunners or chogset, the young of many larger fish, the different kinds of crustaceans, including also the lobster, etc. These are not interfered with to any material extent by any form of net, as they are too small to furnish profitable employment in their capture, and they pass readily through the meshes of any nets that would be set for other purposes.

“ Although, therefore, the amount of spawn and of young fish may be materially less than a previous average, the predacious animals just referred to will probably still destroy as many as ever, since they have every opportunity for picking up their prey at all times ; and whatever the scarcity at first, they are likely to get all they require.”

Speaking of the white-fish propagation under natural conditions, Seth Green, Esq., of Rochester, New York, Superintendent of the Fish Commission of New York, stated the following facts before the Senate Committee, December 18, 1883. (Report No. 706, 1st Sess. 48th Cong., p. 360) :

“ The young, when he does hatch naturally, is just as good as though he was hatched artificially, but in the natural hatching I do not suppose that there is one white-fish hatched that comes out mature in at least 3,000, I think 5,000. I know we dredged in the Detroit River once until we caught about half a peck, and in that half a peck we had only about ten that were live spawn, if that is anything to go by, and I don't know why it is not.”

That the subsequent experience of the Commission is not such as to alter this conclusion appears by the sworn evidence of Marshall McDonald, January 22, 1884 (Report No. 706, Senate Bill 155, First Session 48th Congress, p. 367) :

“ It is true that the amount taken by man's agency may be infinitesimal compared with the aggregate destroyed by natural causes, but man's supply is.

taken from the remnant which has escaped destruction by natural causes, and all or nearly all must be permitted to spawn in order to maintain production."

To destroy spawn-bearing fish and expect the supply to be maintained, is (as Professor Baird says in his report of 1871) "precisely equivalent to killing off all the mature hens in a farm-yard before they have laid their eggs, and then expecting the stock to be continued indefinitely. As well might the farmer expect to keep up his supply of wheat, year by year, while he consumed all his grain, reserving none for seed, and without the possibility of obtaining it from any other source." The fact that spawning fish will not, as a rule, bite at a hook seems to be evidence of a divinely implanted instinct which the seiner's ability to catch them by other methods tends to antagonize. We are not unaware that it has been said that immediate results do not follow either restriction or free seining, and the corollary is drawn that it is really of but little consequence which is done. This fatalistic view derives its only value from the fact that all the conditions of the situation are not considered.

A qualifying circumstance is stated in the Report of 1871, p. 29, by Prof. Spencer F. Baird:

"As most fish require from three to five years of growth before they are capable of reproduction, and in many cases remain in the open sea until this period is reached, it will follow that for several years after the establishment of an exhausting fishery, the supply may appear to be but little interfered with, since there are several successive crops of fish to come on at the annual intervals, and not until the entire round has been completed do these injurious agencies begin to present the evidence of their severity. It is easy, therefore, to understand why after five or ten years' fishing, the supply of fish in a given bay, or along a certain stretch of the coast, will be reduced to a very considerable degree."

2.

Fish Need Protection.

It follows that the man who asserts that food fish are of uncertain and unknown habits and therefore need nothing for their protection, is opposed to the entire course of State legislation for hundreds of years. He is also at variance with the efforts which Congress has been repeatedly called upon to make, as in 1882, 1884 and 1886 to increase the protection afforded by State laws. It is not always easy to observe the habits of fish. Fish-breeding is not an exact science, but the observation of our fishermen and citizens has given us certain facts which, in our judgment, are entitled to fully as much weight as that from many scientific experts, whose course of dealing with the question seems to be largely to consult these same fishermen, and then, by the aid of a few Latin scientific names, qualify their statements into an air of wisdom. It is now generally conceded that fish

visit the coasts periodically, and largely for spawning purposes. Certain conditions of temperature, food, purity of water are instinctively required by the fish in discharge of their natural and supreme function of reproduction, to the discharge of which all animal life is adapted. Variations in these conditions may cause differences of return in the more migratory fish, but that they spawn and that they come to the shores for that purpose cannot well be denied. It is equally clear that, other conditions being the same, these fish return, and others, "more regular in their habits, continually return to the places where they were spawned. It is an instinct apparently second only to that of the necessity for spawning itself. Hundreds of streams have alewife fisheries enriched every season with the returning crop, and, under wise regulations, in undiminished numbers. Trout, salmon and other fishes are of similar habits. The same is true of more migratory fish. The principle is well put by Prof. S. F. Baird, in his report of 1871, at p. 18:

"In all discussions and considerations in regard to the sea fisheries one important principle should be borne in mind, and that is that every fish that spawns on or near the shores has a definite relationship to a particular area of sea bottom; or, in other words, that as far as we can judge from experiment and observation, every fish returns as nearly as possible to its own birthplace to exercise the function of reproduction, and continues to do so, year by year, during the whole period of its existence. . . . It is an established fact that salmon, alewives and shad, both young and old, have been caught on certain spawning beds, and after being properly marked and allowed to escape, have been found to reappear in successive years in the same locality. . . . The principle is rather more difficult to establish in regard to marine fishes; but experiments have been made by competent men on our coast and elsewhere, which prove the existence of the same general principle in relation to them."

Taking the two facts thus stated, of a regular return and a regular path in reaching it, it becomes obvious that an obstruction at certain places may have a most disastrous effect. The fish, like all animals at the time of reproduction, are timid, shy and easily frightened. This obvious fact appears clearly in a statement of Eugene G. Blackford, a fish dealer of New York, before the Senate Committee on Fisheries of the First Session of 49th Congress, on House Bill 5538, relating to the importing and landing of mackerel caught during the spawning season, Senator Palmer, Chairman (p. 21):

"Mr. BLACKFORD. There is no doubt, any person who goes fishing knows, that if you disturb the fish or break up their schools you are in danger of driving them to seek new feeding grounds and to seek new spawning grounds.

"The CHAIRMAN. It seems to me it would not to the same extent. If you give them three months' relief in this pursuit when they are advancing on a certain line, they would be apt to have their yearly run-ways and they will keep up that line?"

“Mr. BLACKFORD. Yes, sir; if you catch next year only half as many fish as you catch this year, the probability is there will be a good many more left.

“The CHAIRMAN. Are they not more timid, as all animals are, just about the reproductive time than any other, and would not any infringement upon their routes have a more disastrous effect than it would have when they were not in the reproductive time ?

“Mr. BLACKFORD. I am inclined to think so, for the reason that the fish come closer to the shore after the spawning season is over. That of itself would indicate that they are not so shy after spawning as they are before.”

The evidence is uncontroverted that the presence of leaden sinkers dropping to the bottom of the water, followed by the whirl of pursuing or “rounding up” the bottom of the seine, can have no other tendency than seriously to break up the spawning operations of such fish as were not themselves captured. The claim is frequently made that these nets do not go to the bottom. The reverse is the fact. They are frequently torn by coming into contact with the bottom, and on one occasion, off Georgetown, Maine, a coaster’s anchor was brought up. The seiners frequently sound to prevent such accidents. A statement of Daniel T. Church, one of the Church Bros, of Tiverton, R. I., is given in Misc. Docs., 49, 2d Sess. 45th Cong., at page 422 :

“The tide is watched in catching fish. Generally slack water is the time when they can be taken the best, for at that time the seine is not scraped over the bottom, thereby escaping the chances of catching against obstructions and tearing. Cases have happened where seines have been totally lost, and hardly a day goes by when one or more are not, in fishing language, ripped up, and sometimes it takes a week’s steady work to mend them.” . . .

In the event of any disturbance of a spawning ground by frightening the fish, the considerations stated by Professor Baird (Report of 1872, page 29) would be strongly applicable :

“Although it may be perfectly true that the sea is practically inexhaustible of its fish, yet if the fish of a particular region are cleaned out, there is no hope that others will come in from surrounding localities to take their places, since those already related to a given undisturbed area continue in that relationship, and have no inducement to change their ground.”

It would seem, therefore, as if the action of the State in protecting fish during this critical season and extending an especial vigilance to those waters, such as Buzzard’s Bay and Casco Bay, which, by their warmth in water, richness of fish food and other requirements, seem especially adapted to their use as nurseries for young fish, was justified by all the considerations which should induce the State to act at all. In 1886, when the mackerel men realized that their indiscriminate slaughter was killing the goose of the golden egg, they appreciated for

the first time the value of these considerations and flocked to Congress to ask for a close season on mackerel. Just now they are apparently desirous of breaking down these same restraints. It may be said of them, as Mr. Eugene G. Blackford (Senate hearing on H. R. 5538, p. 23) remarked of his present menhaden fishing friends :

“It is simply the devil was sick, the devil a saint would be; when the devil got well, he was not so much of a protectionist.”

This change of view, however, it may be suggested, hardly furnishes your Honorable Bodies with sufficient cause for controlling the action of the States which have kept steadily in view this same protection for reasons whose value has been constant, however their effect upon the commercial fishermen may have varied.

3.

Menhaden as Food-Fish.

These general considerations would seem sufficiently important to vindicate the wisdom of the State's laws. The menhaden can hardly be treated as briefly and superficially as the petitioners have seen fit to present him. While it cannot justly be claimed that his chief use is as an edible fish for the consumption of man, it is equally true that he is entitled to consideration in that aspect and it is obvious that he is fitted for a nobler use than giving a transitory fertility to worn-out fields.

At the New York meeting of the United States Menhaden Oil and Guano Association, at which Mr. G. Brown Goode read his “Short Biography of the Menhaden,” the following language is used :

“As a food resource it is found to have great possibilities. Many hundreds of barrels are sold in the West Indies, while thousands of barrels are salted down for domestic use by families living near the shore. In many sections they are sold fresh in the market. Within six years there has sprung up an important industry, which consists in packing these fish in oil, after the manner of sardines, for home and foreign consumption. In 1874 the production of canned fish did not fall below 500,000 boxes.”

The Committee on Fisheries of the First Session of the 48th Congress (Report No. 706, p. 3) state their conclusion on this subject as follows :

“The fishermen used to catch them in large quantities, and they were purchased and taken all through the State of New Jersey and into Pennsylvania to be corned for winter use, and were prized as an article of food second only to the mackerel.”

Before the Senate Committee in 1882 William P. Chadwick, of New Jersey, gave the following evidence (Report No. 706, 1st Sess. 48th Cong., p. 223) :

“I have caught and sold as high as twenty-five thousand in a day.

“Q. To eat?—A. Sold them to people on the mainland, barrels and barrels of them. I have sold for 50 cents and 75 cents and a dollar a hundred.

“Q. They corned them?—A. Yes, sir; for their own use. Now they cannot get one for money.

“Q. Would they use them if they could get them?—A. Yes, sir; there are hundreds of people that live back in the country would rather have them than bluefish.”

Before the same Committee (Ibid., p. 225) Walter S. Greene, of Long Branch, New Jersey, testified as follows :

“Q. What did you do with the moss-bunkers?—A. Sold them back all over the country to salt.

“Q. What did the people do with them?—A. They salted them away for winter use.

“Q. They pickled the fish?—A. Yes, sir.

“Q. Were they regarded as a good fish?—A. Splendid fish; everybody liked them.

“Q. Have you ever eaten them?—A. Yes, sir; rather have them than any fish that swims.

“Q. You mean salted?—A. Yes, sir.

“Q. You do not mean fresh, do you?—A. Yes, sir; catch them to-day and throw a little salt on them. If you get them corned, I would rather have them than Boston mackerel.”

On page 229 of the same Report, Asher Wardell, of Long Branch, testified as follows :

“Q. And people come with their teams and take them away?—A. Yes, sir; come and take them back in the country and sell them.

“Q. Have you eaten them salted?—A. I have.

“Q. Did you ever salt them for your own use?—A. I have.

“Q. How long did you keep them?—A. Until the next summer.

“Q. All through the winter?—A. Yes, sir.

“Q. And they were a good salt fish?—A. A good salt fish. If I could catch them like we used to have them, I would rather have them than the bluefish salted. The only trouble about them is the bones, and if they were the same size as the shad, there is no more trouble than there is with the shad.

“Q. The bone is not so objectionable with a fish you boil as it is with one you fry?—A. No, sir; I don't think it is.

“Q. And you boil them of course?—A. No, sir; I don't think we ever boil a menhaden; soak them and fry them.

“Q. The same as mackerel?—A. Yes, sir; just the same.

“Q. Are they more bony than the mackerel?—A. Oh, yes.”

It is possible to multiply such evidence indefinitely. These fish are common along the Maine and New Jersey coasts. It is also significant that all these witnesses unite in saying that the present inability of the people to get this cheap and nutritious food, to which the principal objection is the presence of bones, which can apparently be obviated by the use of a little acetic acid in the form of vinegar, is and has been there in diminishing numbers and in increasing shyness due to the operations of the gigantic monopoly of the steam fleet. A pathetic picture of individual helplessness against such a combination is given in the evidence of Robert Lloyd, of Long Branch (Report 706, p. 236):

“Q. If moss-bunkers were allowed to grow to their former size here, would there be a market for them now?—A. Oh, yes.

“Q. People desire to have them?—A. Yes, sir.

“Q. They think as much of them, I suppose, as we in New York do of our whitefish for corning?—A. Yes, sir; the people think just as much of them, or used to, and I suppose do yet, as though they had a hog to kill and salt down. They would almost fight for their turn to come in and get a load.

“Q. Is it the general opinion on the part of the people here that there ought to be some legislation to stop the menhaden fishing?—A. Yes, sir; I have heard it remarked often, and, more than that, I have heard them speak of trying to elect a person to intercede for them.

“Q. That is, choose a representative who would?—A. Yes, sir.

“Q. Thinking that your legislature could do something?—A. Yes, sir; that is what I mean.

“Q. You think, then, that this is a valuable article of food for the poor people; cheap food?—A. Yes, sir.

“Q. And that these menhaden fishermen are destroying it?—A. Yes, sir; I think it must be that; I don't know what else it can be. There is nothing else that anyone can see or think of except that one thing.

“Q. You think also that it is injuring the supply of food-fish, too?—A. Yes, I do.

“Q. There is a great demand for fish, is there not?—A. Yes, sir.

“Q. Especially all through the summer months?—A. Yes, sir.

“Q. And these menhaden would furnish a winter supply?—A. Yes, sir.”

In Misc. Docs. 49, 2d Sess., 15th Cong., pp. 137 *et seq.*, the facts relating to the use of menhaden as food for man as well as many other animals, are given in considerable detail:

“The American Sardine Company of New York prepare the fish in oil, after boiling. At Port Monmouth, they are put up with spices and vinegar under the trade names of ‘Shadine,’ ‘Ocean Trout,’ ‘American Club Fish,’ etc. The process is described and the statement made that ‘the moss-bunker, now metamorphosed into ‘Ocean trout’ instead of being turned into oil, or being employed as a top-dressing for sterile soil, makes quite a delectable food, and doubtless to-day

the advance of civilization in the United States is shown in remote portions of the country by cairns made up entirely of empty tin boxes once filled with edible mossbunker.

“Hon. S. I. Goodale, of Saco, Me., has invented a process by which the juices in the flesh of the fish are extracted to form an article of food which promises to be of much commercial value.”

On the subject of menhaden as an article of food, Prof. S. F. Baird says (Extracted from “Documents and proceedings of the Halifax Commission, 1877, under the treaty of Washington, of May 8, 1871, pp. 2795-2816 and 2821-2849):

“Q. What have you to tell the Commission about the menhaden at the South.—A. The menhaden is a very important fish on the south coast as an article of food. It is caught, salted and pickled, and to some extent used in the country. There is quite a large export of menhaden to the West Indies from the Southern States.

“Q. Is it used fresh?—A. It is salted and pickled. It is also eaten fresh very largely, and considered a capital article of food.

“Q. Have you eaten it, yourself?—A. Yes. It is a sweet fish, quite as good as herring, but rather more bony; the bones are, however, more adherent to the skeleton. You can prepare menhaden by maceration so that the greater part of the bone will stick to the vertebral column instead of lying loose about the muscular parts as in the herring.

“Q. It is also salted in the South?—A. Yes.”

It has even been officially decided by the custom-house authorities that menhaden are entitled to the privileges of “food fish.” Mr. Fitz J. Babson, Collector of the Port of Gloucester, states that the question has frequently arisen as to whether menhaden are “food fish” and, as such, entitled to share in the privileges of the law relating to the drawback on salt. Mr. Babson says, “The decision has usually been that they are food fishes.” (Misc. Docs. 49, 2d Sess. 45th Cong., pp. 137).

4.

Menhaden as Food for Fish.

There can be no possible question that the mission of the menhaden is not primarily to furnish oil or fish manure, but has a well-defined and practically invaluable position in the economy of nature. The fact is very clearly stated by Prof. Brown Goode (U. S. Fish Commissioner’s Report, 1877, Part V, page 109). Speaking of the menhaden, he says:

“It is not hard to surmise the menhaden’s place in nature; swarming our waters in countless myriads, swimming in closely packed and unwieldy masses, helpless as flocks of sheep, close to the surface, and at the mercy of any enemy, destitute of any means of defense or offense, their mission is unmistakably to be eaten. In the economy of nature, certain orders of terrestrial animals, feeding

entirely on vegetable substances, seem intended for one purpose,—to elaborate simpler materials into the nitrogenous substances necessary for the feed of other animals, which are wholly or in part carnivorous in their diet; so the menhaden, deriving its subsistence from otherwise mutilated organic matter, is pre-eminently a meat-producing machine.

“Man takes from the waters annually six or seven hundred millions of these fish weighing from two hundred and fifty to three hundred thousand tons, but his indebtedness to the menhaden does not stop here. When he brings upon his table blue-fish, bonitos, weak-fish, sword-fish, bass, cod-fish, what is he eating? *Usually nothing but menhaden.*”

This proposition is so self-evident that but slight authority need be cited.

That all predacious fish are ravenously fond of menhaden is apparently conclusive that menhaden are their appointed food, unless the mind is hopelessly stretched in the process of endeavoring to understand how a fish continually followed and bitten by other fish, to which, also, it furnishes the most attractive inducement to eat when used as bait, can be anything but their food. The facts are partly given in Misc. Docs. 49, 2d Sess. 45th Cong., p. 104 :

“All the large carnivorous fish prey upon the menhaden. The tunny or horse mackerel (*Orcynus Thynnus*), the pollock (*Pollachius Carbonarius*), the whiting or silver hake (*Merluccius bilinearis*), the striped bass (*Roccus lineatus*), the squeteaque or weak-fish (*Cynoscion regalis*), the sea trout or Southern squeteaque (*Cynoscion Carolinensis*), the gar-fish (*Lepidosteus osseus*), the trout (*Me-cropterus nigricans*), the cat-fish (*Siluridæ*), are among its worst enemies. The sword-fish (*Xiphias gladius*), the bayonet-fish (*Tetrapturus albidus*), the dog-fish, whether smooth or horned (*Mustelus lævis* and *Squalus Americanus*), the shark (*Alopias Valpes*), the blue-fish (*Pomatomus Saltatrix*), and bonito (*Pelamys sarda*), make the menhaden their principal food, and they are frequently found in their stomachs. The cod-fish (*Gadus morrhua*), may be said also to make menhaden their favorite food, as is shown by the fact that they bite freely at a menhaden bait.”

In the Senate Hearings of 1882 (Report 706, p. 21), the evidence of W. G. Smithers is to the following effect :

“Q. Its value, then, you think, consists in its value as a food for other fishes?—A. Yes, sir.

“Q. Well, in that respect do you think it is necessary to be preserved in order to continue the supply of other food-fishes?—A. Yes, sir.

“Q. You think some of the other food-fishes are dependent almost entirely on the menhaden?—A. I do.

“Q. What kind?—A. Principally the blue-fish. I will state here that the blue-fish is probably one of the most, if not the most, important food-fish for the people at this time of the year.

“Q. The largest in quantity?—A. The largest in quantity, and the greatest demand is for bluefish. To give you an example, a hotel of this kind will use 1,000 pounds of blue-fish to 10 pounds of salmon.”

Before the same committee Samuel Skellinger testified as follows (p. 162):

“Q. Suppose the question were addressed to you now: Shall the right of the people to have their food-fish be preserved in preference to the destruction of the menhaden for manufacturing purposes, or shall the menhaden interest triumph, irrespective of the interests of the people? What would you say to that proposition?—A. I should say that the fish should be protected, by all means.

“Q. For the use of the people?—A. Yes, sir. Now the menhaden is used for bait, and, to show you that fish prefer that ahead of any other bait, it is used by the fishermen with the fishes on the banks, for the black-fish and sea-bass, and it is used for the fish to the eastward in preference to all other bait, which shows that the fish prefer that.”

At p. 150, George Hildreth gives the same evidence :

“Q. Have you ever taken menhaden out of blue-fish on opening them?—A. Oh, yes.

“Q. Have you ever taken them out of red drum?—A. Oh, yes.

“Q. So that you know that the red drum feed on them?—A. I saw three or four once weighing three-quarters of a pound apiece in one fish.”

Joseph F. Reed (p. 198) is to the same effect :

“Q. What fish feed on the menhaden?—A. Blue-fish.

“Q. Any other?—A. Yes, sir; striped bass follow them up, and weak-fish follow them up.

“Q. All these three fishes feed on them, you suppose?—A. Yes, sir; a cod will follow them up.”

That the menhaden furnish a necessary bait for many other edible fish is strong evidence that menhaden are the natural food of these fish.

The evidence of Mr. Charles A. Dyer, of Portland, Me., before the Senate Committee of 1882 (Report 706, p. XI.) :

“A great many men in this State get their living by fishing in open boats, and they depend on pogies for their bait; they catch cod-fish, haddock and hake, and it is their business principally; has been for years; they get their living in that way and support large families, and when you take the pogies away from them, you take away their bread and butter. They do not know hardly where to turn.”

The evidence to the same effect scattered through this report from numerous and intelligent witnesses, is largely cumulative and need not be cited at length.

Before the Maine Legislature of 1891, Mr. Benj. F. Hinckly, of Georgetown, testified that he had frequently taken whole menhaden from the stomachs of cod, and his statements met the endorsement of large numbers of his fellow fisher-

mén, including Capt. John Condon, of Belfast, Me., who, when asked if cod-fish would eat menhaden, replied: "Yes. They catch them just as full as they can hold, their tails sticking out of their mouths."

The statement is frequently made that it is necessary to continue the operations of the menhaden oil steamers in order to secure bait for other fisheries—and the claim is advanced that unless this is done, the American fishermen will be obliged to resort to Canadians for their bait. How this claim corresponds with the further claim of the same gentlemen, that these fish do not feed upon menhaden, need not be examined. The bait question is certainly an important one. Undoubtedly it was largely the inability of our fishermen to get bait from our waters which put an end to the many advantages this country enjoyed during its "Reciprocity" days with Canada under the treaty of 1871. These patriotic gentlemen, interested in oil and ammonia, desire that the disadvantage of American cod fishermen in getting bait shall not continue and offer their business as a means of meeting the difficulty. Were the point of sufficient importance, it would be interesting to inquire precisely in what way capturing about 500,000,000 menhaden adapted for bait, and boiling and pressing them into guano and oil, even from places like the coast of Maine, where they are captured in order to be sold for bait purposes, tends to help our American fishermen procure their necessary supply of bait?

Indeed, it is claimed, on the contrary, that it was precisely the operations of this steam "porgy fleet," which by destroying so much bait, compelled our citizens to resort to Canadian sources of supply and thereby indirectly ended the treaty. Mr. George H. Watts, of Boston, Mass., a wholesale fish dealer, states the matter as follows, in 1886 (49th Congress, 2d Session, Report 1683, p. 4):

"Another important point in that connection is the menhaden question. If our Government would look at that question as we look at it, and prohibit those steamers from catching menhaden for oil, which has driven them off of our shores almost entirely, we would have plenty of menhaden all the time. But these steamers begin in the spring and catch them at all seasons, and grind them up for oil, and that has a strong tendency to drive the menhaden from our shores."

"Q. Are they good bait?—A. Splendid bait.

"Q. Would you prohibit that entirely?—A. I don't know as to that. But it seems to me really that if this controversy is going to continue between the two countries in regard to the fisheries, we ought to use every endeavor and every resource we have to procure our own bait. These steamers go out and catch menhaden and porgies expressly for oil purposes. The steamers are built for that purpose. They take them in large quantities and have done so for years until the last year or two, when they have scarcely been able to get any.

"They take all that comes along and grind them up for oil. Our fishermen, of course, have to go without that bait, from the fact they cannot find any. If something was done by legislation to prevent those steamers from catching menhaden for a certain length of time, we would have them back on our shores."

Professor Hind's statements in his work on the "Effect of the Treaty of Washington," p. 142, printed during the existence of the treaty, are interesting in this connection, as giving the same facts from another point of view :

"It is not the fishermen alone who diminish the value of the waters of the United States as food producers. It is the agriculturist, the manufacturer and the lumberer. If the supplies directly or indirectly afforded by British American coastal fisheries are suddenly annihilated, the effect of the inquiries instituted under the direction of the U. S. Commissioner of Fish and Fisheries would be at once directed against the fish oil and fish guano manufacturers as well as the lumbering and other interests which have so diminished the anadromous species and destroyed the cod fisheries of the New England Coast. What with the ravages of the blue-fish and the demands of the industrial interests named, the drain upon the United States waters is far beyond the natural resources of the limited area in which the cod, the hake, the halibut and the other deep sea fish are caught, hence recourse must be had to British American waters or the open sea, remote from the United States, and bait must be obtained to secure remunerative fares. . . . Without this bait the fishing would be commercially impossible; with it, it remains not only remunerative, but permits those special fisheries which have fish oil and fish guano as their object, to go on without that legislative interference which would otherwise be invoked by a powerful interest contemplating impending ruin and discerning its cause."

In speaking of the menhaden, Prof. G. Brown Goode (Misc. Docs. 49, 2d Sess. 45 Cong., p. 1) says :

"As a bait fish, this is found to excel all others. For many years much the greater share of all our mackerel have been caught by its aid, while our cod and halibut fleet use it, rather than any other fish, when it can be procured."

The value of menhaden as bait was abundantly testified to before the Halifax commission (Proceedings Halifax Commission, 1877, Appendix M., p. 81 *et seq.*):

That menhaden are the appointed food of various fish is a fact of immense significance to our fisheries. They necessarily attract fishes more valuable than themselves to our coasts, and keep them there. Thus, if they are not followed as food, the object of their pursuit of these menhaden is immaterial. If they bring them to our coasts, they are there and available for our people. That they are accompanied by more valuable fish is the result of observation. As Mr. G. Brown Goode says in his "Short Biography" :

"With the advance of spring the schools of menhaden appear near our coasts in company with, and usually slightly in advance of, the other non-resident species, such as the shad, alewives, blue-fish, and squeteague."

It is the further result of observation on the coast of Maine, that the men-

haden were caught during the free-fishing period between 1871 and 1879 in large numbers by these steamers. In Belfast Bay, alone, twenty of these steamers were engaged in circling about during the day, frequently setting their nets. Prior to that time in this Bay could have been taken an abundance of food fish by hook and line, viz., cod, hake, haddock and mackerel. These fish disappeared in the same ratio that the menhaden did and did not return till 1891, when a few tinker-mackerel came back in proportion as the menhaden did. Such facts, which cannot be successfully disputed, would seem worthy of the most careful consideration. The Legislature of our State saw sufficient reason in this and similar facts along the entire length of our coast to substitute protection for free fishing in 1879, in the clear and apparently well-founded belief that such a course was essential to the preservation of our fish supply. We cannot contemplate the consequences of any reversal of this policy without the liveliest feelings of alarm. To us, the entire consequences are summed up by Mr. G. Brown Goode in his "Short Biography," where he says :

"In estimating the importance of the menhaden to the United States, it should be borne in mind that its absence from our waters would probably reduce all our other sea-fisheries to at least one-fourth their present extent."

5.

Food Fish Taken with Menhaden.

It is among the alleged facts presented to the committee that the operations of the menhaden steamers do not result in catching any food fish whatever, and various statements have been advanced to the effect that not sufficient food fish have been taken to supply the crews. It seems that the experience of others has not been identical. Indeed, it may be doubted whether these vessels in all cases know just what they do capture. The operations are conducted on so large and rapid a scale as to make it extremely difficult to do so. The facts are stated in the evidence of Captain Nathaniel B. Church, one of the firm of Church Bros., of Tiverton, R. I., before the Senate Committee in 1882. (Report 706, p. 7) :

"Q. Now, if you have caught food fish, state to what extent?—A. We have caught so very few that we have not caught enough to eat, really. On this trip of 2,000 barrels we brought in yesterday, we caught one blue-fish; that is all in the whole lot. We caught probably a hundred sharks, and for the last six weeks we have been fishing off the capes of Delaware; there, in the body of menhaden, we have not caught fish enough to eat; nowhere near enough. We catch sometimes a bonita, half a dozen blue-fish, a weak-fish or two. We caught three Spanish mackerel for the year, and three sheepshead. We caught very few mackerel in the spring. We always make a point to pick out all the food fish we can.

"Q. What do you mean, throw them back?—A. No, sir; throw them on deck, to eat.

"Q. You take in your fish by steam-power, do you not?—A. Yes, sir.

"Q. I suppose it is impracticable to make any careful selection?—A. Yes, sir.

The fish come in in quantities of five barrels in the net. They go down the same as on this floor, and they spread out. Of course you would not have time to see the whole.

“Q. How are they deposited in the vessel?—A. In bulk.

“Q. What in?—A. In a hold, made on purpose. The compartment holds anywhere from 500 to 1,600 and 1,700 barrels.

“Q. And as the fish are brought in in the landing-net they are thrown into that?—A. They are dumped down right into the box; the same as this room, exactly.

“Q. What is the depth of the hold?—A. The depth of my boat is about eight feet.

“Q. How much square?—A. It holds 1,600 barrels. It is 28 or 30 feet long, about 20 feet wide, and 8 feet deep, I think. I do not know the exact dimensions; that is as near as I can guess it.

“Q. If you capture sufficient you throw them into that until you fill it?—A. Yes, sir.”

Mr. Oscar O. Friedlander, seven years a menhaden fisherman, before the same Committee (p. 23) testified on this point as follows :

“Q. Have you ever seen blue-fish as large as that caught in your seines?—A. An odd one here and there, yes, sir; a straggler.

“Q. The seine is unloaded into the hold of your ship pretty rapidly, is it not?—A. Yes; they unload about a thousand a minute; quicker than that even. They have steam hoisters on board the steamer and hoist them out.

“Q. And the opportunity to see what kind of fish they are is to see them as they are thrown out into the bins?—A. Yes, sir.

• “Q. They are never examined afterward, are they?—A. Well, we see them at the factory as they come in.”

The testimony of Samuel B. Miller, of Brooklyn, N. Y., a fish dealer, before the same Committee (p. 39), is in interesting contrast :

“Q. The captains of four or five of the menhaden fish steamers have testified that they rarely catch food fish of any kind; it is an exceptional fact if they take them. Have you any knowledge in regard to that?—A. I have knowledge that I received 70,000 pounds from one of Daniel Church's steamers within the last thirty days.

“Q. What fish?—A. Weak-fish.

“Q. Do you remember the name of the captain?—A. His name is Church. I think he is one of the brothers.

“Q. Which brother?—A. I do not know any by name except Daniel.

“Q. Well, Daniel does not fish.—A. He does not now; has not for a number of years. I have been acquainted with them since they were very young; they are very nice men. He claimed that they thought they were a school of bunkers.

“Q. That is, menhaden; they claimed to have taken them by mistake?—A. Yes, sir.

“Q. And they were put on the market?—A. There were 10,000 pounds of them put on the market.

“Q. What was done with the balance?—A. Barren Island. That is the load I spoke of. I should think there was 70,000 pounds weight.

“Q. Do you recollect how long ago it was?—A. It was within thirty days. It is not much more than two weeks ago. I sent a check to Daniel at Tiverton for what he had sold here.

“Q. With that exception what knowledge have you, if any, as to their taking food fish?—A. I have no knowledge of their taking any food fish other than they have sent to market. They have had mackerel and sent them up to market to be sold in the market.

“Q. What market?—A. Fulton Market; but I have no knowledge of their taking any that they sent to be tried out, except those that were unfit for sale. They sent these to market, but they could not be disposed of there.

“Q. They describe the hold of the ship as a bin 20 feet wide, 25 or 30 feet in length, and 8 feet in depth; and I should judge from their description that they put fish in there at the rate of about a thousand a minute; they estimate their scoop will take a thousand, and say they can throw a scoopful every minute into the hold of a vessel in that way. I suppose food fish, if thrown in that way, would not preserve long in a condition fit to use?—A. They throw them right into the hold of the vessel. It is heated. The whole steamer is heated. Then they turn water in on them to cover them.

“Q. That is new to me.—A. And when it has lain there some time, they blow it out.

“Q. Blow the water out?—A. Yes, sir. If he catches any food fish, which he does in the spring, fine mackerel, he generally sends them up to me, and we dispose of them.

“Q. What captain do you speak of?—A. Daniel; all his captains. These fish were very fine indeed; some they dressed on deck coming up. I took out enough to make 10,000 pounds. It was night; too late to take care of them; and those down in the hold were heated. Next morning there were none taken out; they were unfit for sale; the captain came up to see me, and I told him to haul right out.

“Q. I want to inquire, to be general, if food fish are caught with menhaden in their mode of taking fish, whether they would be kept in condition for use as food fish?—A. Put in the way they put in menhaden, I do not think those that were eight inches below the surface would be fit in three hours. I think they would heat in less time than that.

“Q. The extent to which they take food fish, if they take them at all, is not, I suppose, within your means of knowledge?—A. No, sir.

“Q. How many have you purchased of menhaden boats this season?—A. I had a smack come up with a load that she took from one of the menhaden steamers, dressed them and put them below and iced them. She was down there and had her ice in. They were brought for market.

“Q. Give an estimate of the cargoes you have purchased this season.—A. She must have had 15,000 pounds.

“Q. From the menhaden boats?—A. Yes, sir; they were in pretty good condition.

“Q. Do you mean in addition to the 70,000 pounds you mentioned?—A. Yes, sir.

“Q. What description of fish?—A. Weak-fish.

“Q. Any blue-fish?—A. I do not think there were any in that boat; in the 70,000 pounds there were some blue-fish; perhaps there might have been 500 pounds. That is all I know of coming to our market this season from any of these menhaden fishermen.”

The evidence of Maurice Cresse, of Cape May City, is to the same effect (p. 154):

“Q. Now, you know something of the habits of the fish. Wherever a school of menhaden is found and surrounded by a purse-net, is not it a necessity that whatever food fish are pursuing them are taken in with them?—A. Oh, yes. I have fished a purse-net myself.

“Q. For the purposes of oil and fertilizers, the catching of menhaden and other fish, I suppose, is a valuable industry to the people?—A. Yes, sir.

“Q. Which do you regard the more valuable, that or the right of the people to have food fish?—A. I regard the right of the people to have the food fish, and the destruction is very great. Now, I never saw them, but if they should catch a vessel-load of what we call blue-fish or weak-fish, they would put them into the general cargo and boil them up. They would not get much oil, but they would get the refuse, the fish scrap, which is worth twenty dollars a ton.”

The evidence of Mr. Eugene G. Blackford is confirmatory (p. 48):

“Q. Please state in your own way what your judgment is as to the effect of the menhaden industry upon the quantity of food fishes, and the reasons for it; I would like to get your theory about it?—A. My attention was called to this fact from parties calling upon me to make complaint to me, as commissioner of fisheries, that the menhaden fishermen were catching food fishes and carrying them to their factories to be made into oil and scrap. I replied to all those parties that my position as commissioner of fisheries gave me no authority whatever; that there was no law to prohibit that, and that no interference would be made with the business. I have noticed, of course, as I have with everything connected with the fish questions coming up from time to time, that the menhaden interest up to within two years was a growing and expanding interest; that the number of boats was increasing year by year; that our coast was fished from Maine to North Carolina persistently from the time the menhaden made their appearance until the cold weather; that those points where the fisheries were commenced and most actively prosecuted seemed to be exhausted after a few years—I speak more particularly of the coast of Maine, where it is called porgy fishery. They call them porgy, which is a different fish from what we know as porgies. It is the menhaden there—and that, from my own knowledge, every year those fishes which feed upon menhaden grow more scarce. The quantity diminishes most notably in the striped bass, and the present year has been one of very marked scarcity in this, one of our choicest fishes. It is not scarce in one particular point, but it is scarce all along the coast where it is usually found. There have been several instances which have been spoken of here, of my own knowledge, where the menhaden vessels have taken large schools of food fish and have brought them to market. This very large catch of 1881, about a year ago, just about this time of the year, was principally of weak-fish. Some four or more

vessels came up to Fulton Market with a cargo, a quantity of at least 200,000 pounds, nearly all weak-fish, and out of that 200,000 pounds about one-fourth of it was marketed.

“Q. Where had they been taken?—A. They had been taken probably not over five miles from where we sit, right along this coast here, the coast of Long Island.

“Q. The outer coast of Long Island?—A. As I recollect, it was right in the vicinity of Rockaway they were taken. About one-fourth of those fish were in good condition, fit for food. These are the fish that were lying upon the top layers, so to speak. The fish had been taken and dumped into the holds of the vessels, and, it being very warm weather, heated of course, where they lay packed in underneath with the weight of those on top, and men were put to work discharging the fish, distributing them to every dealer who would take them on consignment to sell. They were sold as low as one cent a pound. There was an effort for immediate distribution of the fish because of the warm weather, and they needed immediate attention to keep them any time. The balance of those cargoes were sent to the factories. The vessels steamed away with them, and they were rendered into oil and scrap.

“Q. Do you know to whose factory they went?—A. No, sir. That is the most notable instance. That all the menhaden fishermen would rather bring their food fish to market than to put them into oil and scrap is a self-evident fact, if they were provided with proper facilities for the care of the fish; if they were fitted for market fish.

“Q. Yes, I understand that they are not a desirable fish to manufacture?—A. No, but you take a blue-fish in the fall of the year, and it is very fat.

“Q. Now the other part of my question, as to the effect of the menhaden fishery upon the food fish and the reasons for it; can you state that?—A. In my opinion the effect of the great amount of fishing that is carried on for menhaden all along the coast breaks up the schools of fish which are followed by the striped bass and blue-fish, and has a tendency to make those fish seek other feeding grounds. I speak more particularly with regard to the striped bass, as that is a voracious fish on the menhaden. The striped bass ten years ago were found in more or less quantities nearly the entire summer and late in the fall. Very large catches were taken on the Long Island coast, as many as 20,000 per day coming to Fulton Market. That quantity has been steadily diminishing year by year, and this year the scarcity is more marked than ever before.”

Before the Committee on Fisheries and Game during Legislature 1891, of Maine, M. B. Spinney, of Small Point, testified as follows:

“Q. Have you any knowledge of deep sea fish being caught with seines?—A. I have seen at one time, about northwest of Seguin, them take up twenty-five or thirty barrels of haddock in about fourteen fathoms of water. I think there is a hole called the Hake hole deeper than the sand around it, and they set the seine inside that and went around it, and hauled the seine up filled with these haddock. I have been aboard of the seiners repeatedly and seen sea shad and mackerel.”

Sea shad are one of the most delicious of table fish, and yet during the season

of 1891 one of the steam seines captured an entire school consisting of many hundreds of barrels, and conveyed them to the factory and ground them up into manure. This is from personal investigation, and acknowledged to one of our wardens by one of the manufacturers, whose idea was that

“It was a bad bit of news to get into the press,” that “it would have been better for us not to have taken them.”

The evidence of Thomas J. Horner, a fisherman of Atlantic City, New Jersey (Report 706, p. 170), bears internal evidence of truthfulness :

“Q. Has the supply of the fish used by the people for food increased or diminished during your experience?—A. They have decreased. They have also increased in these last four years. Previous to that they diminished. When I first followed fishing if we did not catch a hundred fish a day and come along the street with less than that the old fisherman’s song was sung to us. I think it is seven or eight years ago that father and I built the first fish factory that was ever built on the coast of New Jersey.

“Q. You mean a menhaden factory?—A. A menhaden factory. It was built for a man that belonged in Connecticut. We were the contractors to build the house. The first load of fish that came to that factory was a load of menhaden; the second load was a load of weak-fish, food fish, a full load. The next load that came to that factory was a load of drum-fish. They were thrown into the waste heap as the weak-fish were. I said to my father then, ‘Father, we have done something we ought not to have done. We have done something that we thought was going to benefit the community which will never benefit it.’ ‘Why,’ he said, ‘boy, how you talk.’ ‘Well,’ I said, ‘it is so. In less than three years from now in our little village where we used to get fish given to us for nothing we will pay ten cents a pound for them.’ In less than three years we could not catch a fish unless we pulled it out from under a sod where he had hidden himself. Then myself and others tried to get a law through the legislature of New Jersey, which we did, and to-day, since that law has been passed, you can catch all the fish in our channels you want. We ask no better fishing than we have got in Atlantic City now, from the first day of June until the first day of September, and the very instant they cast those nets in those waters then our fish are gone again, and we cannot catch them unless we go outside.”

To the same effect is the evidence of George Hildreth, of New Jersey (Report No. 706, p. 150) :

“Q. You spoke of catching great quantities of different kinds of fish when you were fishing for menhaden. What proportion of food-fish would you catch in drawing your seine for menhaden?—A. Sometimes we caught a good many food fish, and another time we caught a very few.

“Q. Well, on the average would there be a considerable quantity of food fish?—A. There sometimes would be quite a number of food fish amongst them, and other times would be very little; whatever there was within the bounds of the net.

“Q. There is nothing in your experience to justify the theory of some of these

witnesses, that the menhaden were always found by themselves exclusively; that they were not largely intermixed with the food fish?—A. On that I can only tell you my experience. I seldom ever made a haul but what I always caught a certain quantity of food fish. I seldom made a haul but what I caught more or less drum.

“Q. Did you fish in shallow water?—A. I calculated to fish in ten fathoms if I wanted to make a haul.

“Q. Did your net reach the bottom?—A. Yes, sir; the net was sixteen fathoms deep.”

6.

Menhaden Fisheries Destructive.

It may seem an unwarrantable assumption that men do not understand their own business. Yet such is frequently the fact. The menhaden men find that they who maintain that the treasures of the sea are not of limitless extent have much on their side. The fact to which their eyes have been absolutely shut is forcing itself to the front. If the driving of food fishes from our coasts, the rotting of unused food in the heat and slime of a steamer-hold, the loss and misery of people on the shore, could be regarded as a necessary sacrifice to the prosperity of the monopoly of the United States Menhaden Oil and Guano Association some compensation might be found. But as their ravages extend their profits dwindle, until we are assured that our ability to catch a few huddling, frightened fish in Buzzard's and Casco Bay can alone preserve this industry from annihilation.

It will be noticed that as the numbers of steamers have increased, the number of fish taken has lessened and the amount of oil largely fallen off, thus showing that the fish are growing smaller as well as fewer.

The conclusion of the committee of 1884 (Report 706, p. 12) contains the following:

“The evidence discloses the very important fact that in 1874 the quantity of menhaden caught was larger than in any year since. In 1874, 492,878,000; in 1881, 454,192,000; in 1882, 346,638,555. The fish caught in 1874 produced 3,372,837 gallons of oil, while those caught in 1881 produced only 1,266,549 gallons. It is shown by the evidence that the fish are smaller and of an inferior quality from year to year, as the industry has been extended.

“The menhaden is what is termed a surface fish. They swim in schools near the surface and are supposed to feed upon the supplies they find floating in the water. It is abundantly shown that they are a fish that are easily frightened, and that the use of the menhaden vessels and steamers has a tendency to break up the schools and frighten the fish from the shore to such an extent that they have almost entirely disappeared wherever the same are employed. They disappeared from the coast of Maine a half a dozen years since, so that the factories have been abandoned. Very few are now taken in the Narragansett Bay, where at one time the supply seemed inexhaustible. Such is the case on the Long Island coast and the coast of New Jersey, where formerly they were very plenty.”

The following table compiled from the official report of the U. S. Menhaden-Oil and Guano Association, shows clearly the facts above stated :

1874.		1881.	
No. of factories.....	64	No. of factories.....	97
“ men at factories...	871	“ men at factories...	2,805
“ fishermen.....	1,567	“ fishermen.....	2,406
“ sail vessels.....	283	“ sail vessels.....	286
“ steamers.....	25	“ steamers.....	73
-Oil made (gallons).....	3,372,837	Oil made.....	1,266,549
Tons guano (wet).....	50,976	Tons guano (dry).....	33,619
Fish caught.....	492,878,000	Fish caught.....	454,192,000
-Capital invested.....	\$2,500,000	Capital invested.....	\$1,750,000

In other words, in 1881 it took three times as many men, three times as many steamers as in 1874, to get less fish and one-third the oil.

That the menhaden fisheries have diminished is abundantly shown by other authorities. In a statement of Prof. G. Brown Goode before the “International Fisheries Exhibition,” London, England, (quoted in 79 Cong. Rec. p, 4788), he says :

“There can be no doubt that the extensive fisheries prosecuted by menhaden steamers in the Gulf of Maine were prejudicial to the shore fishermen by driving the fish they formerly caught for bait out to sea and beyond the reach of their nets.”

The reason is also furnished by the same gentleman (Misc. Docs. 49, 2d Sess. 45th Cong., p. 117):

“The purse seine is doubtless more effective than any other fishing apparatus ever devised. By its use a school of almost any size can be secured *without the loss of a single fish*. The enormous demands of the oil factories can be met only by fisheries conducted on the grandest scale, and the purse-seine is used by the factory fleets to the exclusion of all other nets.”

Mr. S. L. Boardman, of Augusta, Me., in an interesting report to the State Board of Agriculture, of which he was secretary, 1875, p. 60, states the fact as follows :

“Parties engaged in taking menhaden now go off 10 or 20 miles from shore, whereas they formerly fished near the coast, and they now find the best and ‘most profitable fishing at that distance.’ This fish is included among the shore fishes described by Prof. S. F. Baird as having suffered ‘an alarming decrease’ along the in-shores of the United States, owing partly to excessive fishing throughout their spawning time in order to supply the oil factories.”

For various evidence to the same effect, see Misc. Docs. 49, 2d Sess. 45th Cong., page 75:

In the same document, Prof. G. Brown Goode states this fact at p. 144 :

“Constant fishing on the Northern coast has driven the menhaden out to sea, though in the South their habits are much the same as of old. In New England the Menhaden Fishery has become to a certain extent sea fishing and is *prosecuted on the grandest scale.*”

We are occasionally ridiculed for deeming extinction of so prolific a fish possible. We desire respectfully to call attention to the fact that in some cases destructive fishing actually has resulted in the extermination of menhaden. For example, in the “Case of Her Majesty’s Government” before the Halifax Commission, the claim is made that “the menhaden bait itself can be bred and restored to places in the Bay of Fundy on the coast of Nova Scotia where it existed up to the time of its extermination” (Misc. Docs. 49, 2d Sess. 45th Cong., p. 101).

The only competent authority which even by implication sustains the menhaden oil and guano extractors against the concurrent weight of this testimony is the United States Commissioner of Fish and Fisheries. The position of this organization is expressed in the statement of Prof. G. Brown Goode, when, speaking of menhaden, he says (Misc. Doc. 49, 2d Sess. 45th Cong., p. 92) :

“There is no evidence whatever of any decrease in their numbers.”

In various forms the same sterile assertion furnishes their sole comfort to the Menhaden Association.

This statement, however, while weighted with the well-known ability of the Commission and the prestige given it by the humane and scholarly course of Prof. S. F. Baird, should be viewed in the light of at least two other facts. The first apparently is, that while the evidence adduced of diminished supply in particular localities is uncontroverted, the opinion of the Commission, by their own candid statement, is almost entirely guess-work. For example, in Misc. Doc. 49, 2d Sess. 45th Cong., p. 92, speaking of menhaden, they say :

“There are, however, no data for definite comparison, nor is there any means of determining the ratio of increase or decrease within a given period of years. The same must be said regarding the effects of the wholesale capture going on every year on certain parts of the coast, for the present perfection of fishing apparatus and the skill of the fishermen is likely to prevent any apparent diminution of the yearly returns of the fisheries, even though the species be gradually approaching extinction. It is quite evident that with the improved methods now in use, a much larger proportion of the fish frequenting any given body of water may be taken than was formerly possible.”

The second fact is that the Commission does not even attempt to deny that particular localities are being stripped of their fisheries with all the hardship to our humbler fishermen implied in that statement.

In Misc. Docs. 49, 2d Sess. 45th Cong., p. 111, it is said by Prof. Goode :

“It is the commonly received opinion that purse-net fishing is destined evidently to destroy all the menhaden in our waters. . . . The same may be said regarding pound-net fishing. It is doubtless true that the fisheries in a given locality may deplete the immediate region in which they are prosecuted. The cod and halibut may be fished for upon a single bank until the local supply is exhausted.”

We respectfully submit that a state of affairs is not here presented such as to induce affirmative action on the part of Congress, in the absence of anything but guess work by “experts,” such as would inflict irremediable hardship upon thousands of our hardy fishermen, than whom our Nation has no better citizens. To the ear of the National Fish Commission should come the voice of poverty and toil, to which the ear of our State Commissions are not and never should be closed. It is a voice vibrating with its earnestness of appeal. From thousands we may instance that contained in a memorial of the citizens of Hyannis addressed to Congress (Misc. Doc. 61, 2d Sess. 42d Cong., p. 137) :

“Shall the rich man’s dollar be allowed to drive us from our house and all that is sacred to us in memory? Must we look on and see the rich man’s dollar rob our children of bread and clothing? It will be hard work. We have contended with old ocean from our youth. Why should we not have good laws that would encourage rather than discourage the poor man while toiling to earn bread for his family? God grant that your wisdom may be guided in the right direction!”

The effect of evidence that fish visit the coast for spawning purposes, and that fishing for menhaden by exhaustive processes, such as purse-seines, in these waters, destroys the supply in a most pernicious manner, is endeavored to be met by evidence that menhaden do not spawn on these coasts. Again, the United States Fish Commission is relied on for assistance. The evidence of these gentlemen is of the same satisfactory character as that furnished as to the diminishing numbers of the menhaden. No mature ova of menhaden have been seen by any officer of the Commission prior to certain dates; the menhaden leaves our waters in the fall with immature ova and spermatories; menhaden are found later further South with full ovaries; menhaden accidentally found in Provincetown Bay in December had full ovaries. From this is constructed a theory that menhaden leave early in the fall before spawning; go, no one knows precisely where, for the purpose, and come back in the spring to repeat the process. But when a definite statement is made by Professor Hind that the menhaden spawns on our

coasts in the spring, and that "following the laws which govern fish-life its mode of spawning resembles that of the typical herring," all that the Commission of Fish and Fisheries can say in reply is that "This may or may not be true. No one knows." The menhaden (*Brevoortia tyrannus*) is a species of herring. Why should it vary so widely from all the members of the herring family? It may be said with equal confidence that many facts bear out the correctness of Prof. Hind's view. In the first place, the different schools seem related to particular places—apparently leading to the conclusion that a menhaden is really not much more essentially migratory in its habits than an alewife (*Clupea Vernalis*). Professor Goode says (Misc. Docs. 49, 2d Sess. 45th Cong., p. 65):

"A Maine menhaden can easily be distinguished from a Long Island menhaden, a Chesapeake or a Florida one, by certain indescribable characters, easy to perceive, but difficult to define. The presence of the crustacean parasite in the mouths of Southern menhaden, and its constant absence from those of the North, is a very strong argument in favor of local limitations in the range of menhaden schools. . . . That the same schools of menhaden return year after year to the same feeding grounds is very probable. . . . The schools in the Southern waters do not receive any apparent increment at the time of the desertion of the Northern coast, nor are the Southern waters deserted at the time of the abundance in the North."

Another significant circumstance is, that the menhaden visit the natural spawning beds of other fish. Professor Goode says (Misc. Doc. 49, 2d Sess. 45th Cong., p. 70):

"They seem particularly fond of shallow waters protected from the wind, in which, if not molested, they will remain throughout the season, drifting with the tide, in and out of the shallow indentations of the shore and into the mouths of creeks and rivers."

Why is the conclusion that they are here to spawn not quite as logical as any other? The arrival of the menhaden promptly upon the first opening of spring and the immediate sequence of small menhaden after the arrival of their parents would, in case of any other fish, suggest local spawning.

"Young fish from four to six inches long make their appearance in vast numbers a few weeks after the adult fish." (Prof. G. Brown Goode, Misc. Doc. 49, 2d Sess. 45th Cong., p. 98.)

At page 508 of the same document, Captain Henry E. Webb, of Rockport, Mass., states that he has caught menhaden each year full of ripe spawn, always before the middle of May. In Long Island Sound he was accustomed to catch multitudes of young menhaden in a mosquito-net seine toward the end of summer.

These little fish, when they first come into the creeks, were transparent and about *half an inch long*, but increased rapidly in size toward the end of the season and in the fall measured four or five inches.

At page 507 of the same document, Capt. Robert H. Hurlbert, endorsed by Professor Goode as "never found inaccurate," tells us late in April, 1875, he saw a number of menhaden, *full of spawn*, captured with a school of mackerel, off Delaware Bay. Late in April, 1877, he seined ten barrels of fat large fish on the eastern shore of Virginia. Their abdomens were much distended, and all which were examined were found to be full of spawn. Later in the season off Block Island no spawn was found.

Nathaniel T. Church, one of the Church Bros. of Tiverton, R. I., at p. 420 of the same document states as follows :

"But we have abundant evidence that they do spawn in this (Narragansett) Bay, from the fact that often in taking in our nets, bushels of their spawn and also during some seasons there are large quantities of small fish about the size of sardines. They are always seen in the fall. . . .

"It is hard to tell when the fish leave the coast, for we can fish with our purse-seines and have good fishing if it is good warm weather, but if it comes on cold the fish vanish, and to all appearances they are gone, for they do not show on the surface of the water; but the gill nets will take them long after, and they have been so taken as late as New Year's, when they are quite plenty. This shows that they are not gone at that time. *Who knows but what they are close by all winter?*"

At p. 96 of the same volume evidence is given that menhaden with ripe ova and spermatories were found in Maine in June, 1878, and that numberless small menhaden were found soon after. Professor Goode's subsequent view appears at page 507 of the same document :

"Evidence now tends to show that some of the schools, at least, defer spawning until the season of their approach to the coast in April. Like the mackerel, they seem to come into the shoal water along the shores of the Middle States and southern New England laden with ripe ova, which they may deposit either on the sandy bottoms at a distance from land or in the entrance to the broad bays."

Does the evidence that spawn-bearing menhaden cannot be caught upon the Atlantic Coast during the summer and that menhaden spawn in some remote depths seem so clear as to authorize Congress against the protest of our citizens in giving a monopoly of fishing in Buzzard's and Casco Bay to the applicants for this legislation? And if, as seems probable, the menhaden spawn near the coast, why is not the strong weight of argument in favor of those who contend that the

absence of menhaden on our coasts following purse-seine fishing is due to their destruction during their spawning season ?

In connection with the question of Captain N. T. Church as to menhaden, "Who knows but what they are close by all winter ?" a suggestion of Prof. S. F. Baird with regard to mackerel may be of value. There is no doubt that mackerel which are equally with menhaden included in this Bill, are a food fish and spawn on the coast. It is also clear that their capture, even during the spawning season, would be permitted on our coasts, under this very Bill, the provisions of U. S. Stat., 1887, Chap. 288, not applying to State local fisheries.

Prof. Spencer F. Baird was sworn before the Halifax Commission, and testified in behalf of the Government of the United States as follows (49th Congress, 2d Session, Mis. Doc. 90, page 182). Speaking of the time at which mackerel spawn, he says :

"Q. What can you tell the Commission about the period of the spawning of mackerel ?

"A. Mackerel spawn almost immediately after they visit our shores. The earliest fish taken in the weirs and pounds in Vineyard Sound and Buzzard's Bay are full of ripe spawn, so that when the fish are taken out of the pounds and put into the boats to bring them to shore there are sometimes quarts and pecks of spawn in the bottom of the boats. It runs out with the utmost freedom, as it does with any full-spawning fish. That period ranges from the middle of May on our coast, and from June to July in Bay St. Lawrence. Mr. Whiteacres says they spawn in the Bay of Chaleurs in June. The season extends from the early part of May to the beginning of July."

The fact that mackerel are a migratory fish is not fully established, according to Professor Baird, on page 182 of the same document :

"Q. Is anything known about their winter-quarters?—A. Nothing definite. We miss them for several months, from the end of November until March and April, and we say, we guess, we suggest they go into the Gulf Stream. That they go somewhere where they can find a temperature that suits them, and there they remain is clear, but it is remarkable that they have never been seen schooling in the Gulf Stream ; that they never have shown themselves ; that no fisherman, mackereler, or steamboat captain has ever reported, so far as my information goes, a school of mackerel in the winter season. If they were free swimmers one would suppose they would show themselves under such circumstances. There is a belief very generally entertained among fishermen that they go into the mud and hibernate. That is an hypothesis I have nothing to say against. It seems a little remarkable that so free a swimmer as the mackerel should go into the mud to spend its winter, but there is abundance of analogy for it. Plenty of fish bury themselves in the mud in the winter time and go down two or three feet deep. There are fish so ready to bury themselves in mud, you can dig them out of an almost dry patch as you could potatoes. The European tench,

the Australian mud-fish and dozens of species do that. There is nothing whatever in the economy of mackerel or in the economy of fish generally against this idea that it is an inhabitant of the mud; and the fishermen believe that the scale which grows over the eyes, according to their account in winter, is intended to curb their natural impetuosity and make them more willing to go into the mud in the winter and stay there and not be schooling out on the surface of the water. There are well authenticated cases of fish being taken from the mud between the prongs of the jig when spearing for eels. This has occurred off the Nova Scotia coast, in St. Margaret's Bay and Bras d' Or, Cape Breton and part of the bay of St. Lawrence, I am assured is not at all doubtful."

"Q. Do not the fishermen mainly retain the old theory of the northern set of the whole body?—A. Very largely; but I think they are changing their views.

"Q. The fish were mackerel that were brought up out of the mud?—A. When after eels they brought up mackerel out of the mud, in several instances in January."

If these facts are true as to mackerel, why is not a similar theory, which finds many supporters as to menhaden, true as to that fish?

As it is clear mackerel spawn on the coast in the Spring, and as it is at least equally consistent with the facts that menhaden do the same, and as it is agreed that the capture of spawning fish assails not only the present but the future, we submit that no such a case is presented here as should authorize your Honorable Bodies in nullifying our State laws protecting these fish on these spawning grounds. Another result of extreme importance which, we submit, necessarily follows, is that neither menhaden or mackerel are, in the real sense, migratory. They obey the natural law of return to their spawning beds. Therefore, their eggs when deposited in a natural bed, to which they return, are fully as much a part of the municipal or territorial wealth of the State as are the oyster or salmon fishery, and no ground is furnished for any distinction in National legislation concerning them.

At an extremely interesting meeting of the association in 1883 (Report No. 706, at p. 317) the gentlemen interested suspended the consideration of such subjects as whether the money expended in New Jersey "in preventing certain legislation," should be paid by New Jersey members or be made a common charge, assessing themselves \$4,000 "for the purpose of protecting the menhaden interest throughout the United States," devising means how some steps should be taken "to remedy the apparent defect, and supply adequate means of information" to the New York *Herald*, which displays "lack of knowledge in regard to the business of menhaden fisheries," long enough to consider the general state of their business:

"The secretary then read a communication addressed to Mr. Henry Wells by W. A. Abbey, in which the writer said:

"I thought it might be well to draw your attention to the importance of

securing some legislation by Congress to regulate the menhaden fisheries . . . Professor Baird is strongly impressed with the idea that the salvation of our fishing depends upon the cessation of our indiscriminate and persistent spring fishing while the fish are on their passage to their feeding ground. . . . The professor stated that if petitions could be numerously signed by honest fishermen, praying Congress to pass a law preventing the landing of menhaden prior to June 1 or 16, such a law may pass, and if passed he could see no reason why our fishing should not be as productive as any other business. . . . Unless something of this kind is done our business must be abandoned.'

"Mr. Fowler agreed with the letter, and was of the opinion that unless something was done and some sort of a promise made by the association in three years' time the business would die out of itself."

Mr. d'Homergue said :

"Since the deluge, sharks, blue-fish, weak-fish, and all sorts of fish have preyed on menhaden ; but only in the last eight or ten years has there been that sort of fish known as the double-gang, fast-sailing steamer. He had counted fifty-six of these craft between Cape May and Absecomb Lights. The reason stated why the fish did not go east was their good feeding grounds and Delmonico fare. Yet the statistics showed that the fish were fatter and produced more oil to the thousand. Nothing could withstand the predations of the steamers. Some restriction, he thought, was necessary, and if not adopted by the fishermen it might be forced on the association in such a shape as to put an end to the business.

"Mr. Fowler had counted from his factory in Connecticut sixty-eight fishing steamers within eight miles of the wharf. Next year there would be no fishing there, according to his experience."

It would seem unnecessary to refer in detail to the overwhelming evidence to the same effect: the abandonment of the menhaden factories in Maine; the difficulty of getting bait; the uncontradicted and uncontradictable evidence of the fishermen before our State and National legislatures. "What need have we of further witnesses?"

When these gentlemen adopt the above view of the results of their own murderous assaults upon the sources of their prosperity, the only question left for doubt is upon what theory of fairness or honest dealing they propose to ask the Congress of the United States to restrain the States from doing for their own protection precisely the same thing which these men considered essential to the continuance of their business.

If the foregoing considerations commend themselves to your Honorable Bodies, it will have become apparent that no sufficient reason exists for National control of our fisheries, assuming, what we respectfully fail to concede, that Congress has the constitutional power to regulate them. Our laws are based upon the careful experiments and appreciative experience of years. The official guardians of these interests are engaged in a work of great importance not only to the

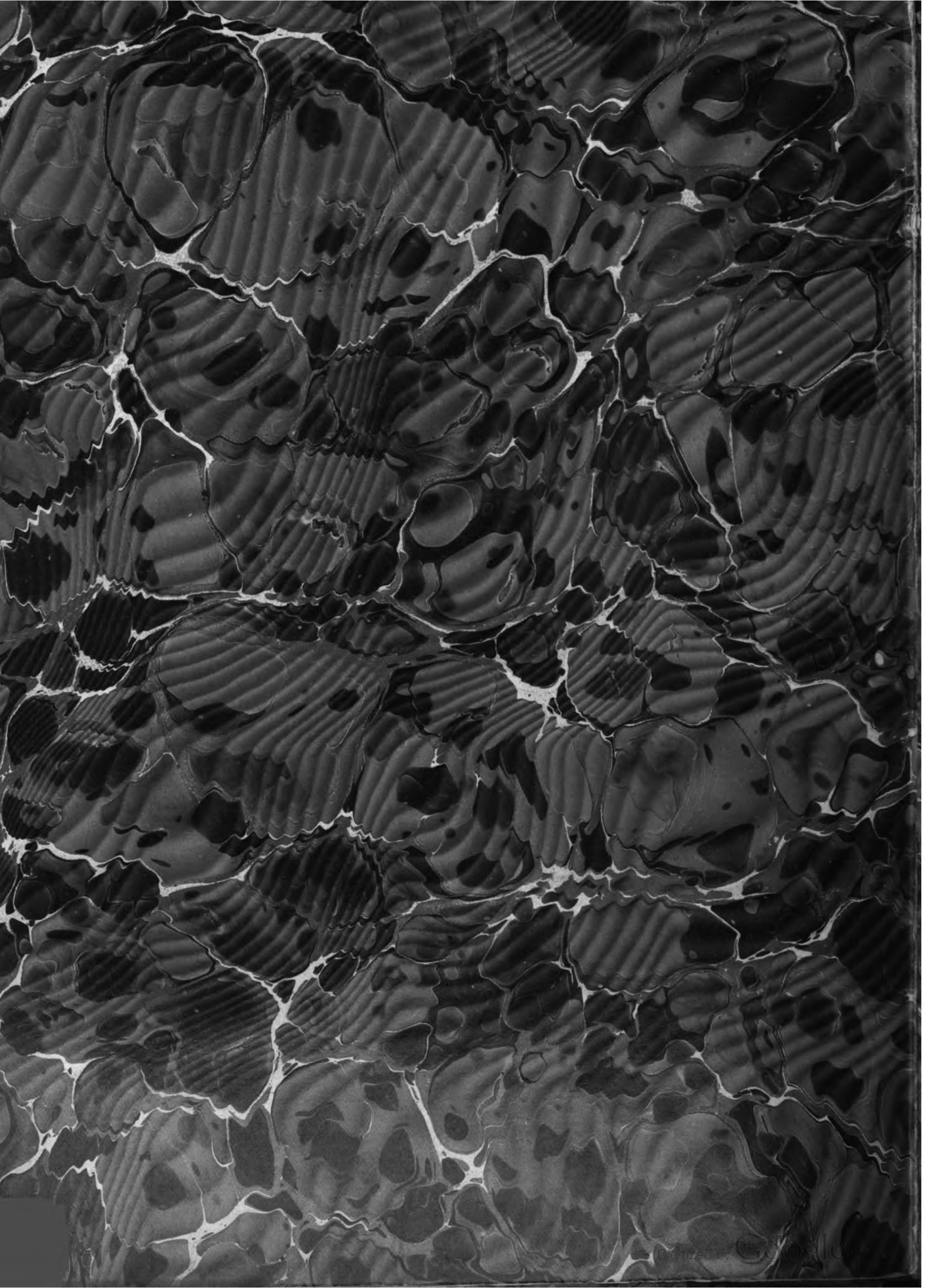
citizens and residents of our State, but to the great inland States who receive the benefit of their work in cheap and abundant food fish, and in other ways to which reference has been made. Their labors are incessant and essentially dangerous. They are met by armed resistance; boastful, wanton defiance and every device which interested cunning and technical ingenuity can devise. These representatives of the law are fairly entitled to expect every moral aid and possible encouragement from the Representatives of that Nation to whose wealth and prosperity they are making earnest, and, as they believe, effectual contribution. Acts of wanton illegality will not be ratified under the broad seal of the United States. It is not before the judgment seat of the lawmaking body of the Union that organized violators of law should successfully assail the legislation of Maine.

SEA AND SHORE FISHERIES COMMISSION,

BY

Edwin W. Gould, Commissioner.

Searsport, Maine.



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