

1893.
NEW ZEALAND.

MINIMUM SIZE AT WHICH FLOUNDERS SHOULD BE TAKEN

(REPORT ON QUESTION AS TO).

Presented to both Houses of the General Assembly by Command of His Excellency.

No. 1.

The ASSISTANT SECRETARY, Marine Department, to Mr. W. H. SPACKMAN.

SIR,—

Marine Department, Wellington, 23rd February, 1893.

Referring to my telegram to you of the 15th instant, I have the honour, by direction of the Minister having charge of this department, to request that you will, in conjunction with Mr. F. E. Clarke, of the Lands Office, Hokitika, hold an inquiry into and report upon the question of the minimum size at which flounders should be allowed to be taken. It will probably be desirable for evidence to be taken both at Christchurch and at Lake Ellesmere, and an advertisement should be inserted in the daily papers calling upon persons wishing to give evidence to appear. Notice of the date on which you propose to sit should be sent to Mr. E. G. Wright, M.H.R.

It is understood that it would be desirable, in connection with Mr. Clarke's official duties, that he should be able to return to Hokitika by the 13th March.

It is proposed to pay you at the rate of £2 2s. a day whilst employed on this work, it being understood that it is not likely to take more than a week.

I have communicated with Mr. Clarke, and have informed him that you will telegraph to him as to date which would suit you to begin the inquiry.

I have, &c.,

LEWIS H. B. WILSON,

Assistant Secretary.

W. H. Spackman, Esq., 213, Hereford Street, Christchurch.

No. 2.

The ASSISTANT SECRETARY, Marine Department, to Mr. F. E. CLARKE.

SIR,—

Marine Department, Wellington, 23rd February, 1893.

I have the honour, by direction of the Minister having charge of this department, to inform you that you have, with the consent of the Surveyor-General, been appointed, in conjunction with Mr. W. H. Spackman, of Christchurch, to hold an inquiry into and report upon the question of the minimum size at which flounders should be allowed to be taken, and Mr. Spackman has been asked to inform you by telegraph as to the date he will be ready to begin the inquiry.

It will probably be desirable to take evidence both at Christchurch and at Lake Ellesmere, and an advertisement should be inserted in the daily papers calling upon persons wishing to give evidence to appear.

I have, &c.,

LEWIS H. B. WILSON,

Assistant Secretary.

F. E. Clarke, Esq., Crown Lands Office, Hokitika.

No. 3.

The ASSISTANT SECRETARY, Marine Department, to Mr. W. H. SPACKMAN.

SIR,—

Marine Department, Wellington, 25th February, 1893.

Adverting to my letter No. 347/74, of the 23rd instant, I have the honour, by direction of the Minister having charge of this department, to ask you to be so good as also to notify the date on which you propose to commence the inquiry into the question of the minimum size at which flounders should be allowed to be taken to Mr. John Joyce, M.H.R., and Sir John Hall, M.H.R.

I have, &c.,

LEWIS H. B. WILSON,

Assistant Secretary.

W. H. Spackman, Esq., 213, Hereford Street, Christchurch.

No. 4.

Messrs. SPACKMAN and CLARKE to the MINISTER HAVING CHARGE OF THE MARINE DEPARTMENT.

SIR,—

Christchurch, 27th March, 1893.

In accordance with the request contained in your letter dated the 23rd of February, 1893, your Commissioners, appointed to hold an inquiry into and report upon the question of the minimum size at which flounders should be allowed to be taken, beg to report as follows:—

Your Commissioners caused advertisements to be inserted in the *Lyttelton Times* and *Press* newspapers calling upon persons wishing to give evidence to appear, and fixing the times at which your Commissioners would sit to take such evidence. They also communicated direct by letter with Mr. E. G. Wright, M.H.R., Sir John Hall, M.H.R., Mr. J. Joyce, M.H.R., and others whom they understood desired to attend and give evidence.

Your Commissioner Mr. F. E. Clarke arrived at Christchurch from Hokitika on Saturday the 4th of March, and on Monday and Tuesday the 6th and 7th of March your Commissioners held sittings at Christchurch, and took the evidence of Messrs. E. G. Wright, M.H.R.; T. W. Durant (President of the Fishermen's Union); W. F. Warner, hotelkeeper at Christchurch; Sir John Hall, M.H.R.; R. G. Warnes, fishmonger, Christchurch; Professor Hutton; Rev. A. Chodowski, the Jewish Rabbi; and Joseph Germano, fisherman.

On Wednesday the 8th March your Commissioners held a sitting at Leeston, previously notified by advertisement. After taking the evidence of Nicholas Bassi, a fisherman, they visited Lake Ellesmere and inspected the nets, boats, and gear in use, both those on the shore and on the lake, having several of the nets drawn or lifted in order to see the ordinary size, quality, and number taken. They also visited the locality where the outlet is made when the lake is opened, and the reputed spawning-ground.

On Thursday the 9th March your Commissioners held a further sitting at Leeston, and took the evidence of Mr. David Macmillan, Chairman of the Selwyn County Council, the further evidence of Nicholas Bassi, John Stretz, Alexander Lazarette, Charles Johnston, and John Magaldo, the last five being fishermen engaged on the lake.

On Friday the 10th March your Commissioners held a further sitting at Christchurch, when Peter Demetri, the fish salesman or auctioneer for the fishermen at Lake Ellesmere, attended, and produced his books. Your Commissioners also took the evidence of Dr. Frankish, and Edmund Pleasant, a fisherman at Lyttelton, and former President of the Fishermen's Union. In consequence of information obtained from the last witness, your Commissioners deemed it advisable to take the evidence of the fishermen at Lyttelton. They accordingly held a sitting at Lyttelton on Saturday, the 11th March, and took the evidence of Henry Piggott, Robert Seymour, John Williams, William Fitzsimmon, and Peter Hoglund, all of whom are fishermen at Lyttelton.

Copy of all the evidence taken, together with extracts from the books of Mr. Peter Demetri, auctioneer, showing the number of cases received from Lake Ellesmere and the prices obtained, is forwarded herewith.

Your Commissioners are of opinion that Lake Ellesmere is rapidly becoming depleted of flounders of sufficient size to be of any value for the purposes of food, and that, while it still contains a large number of small immature and undersized fish, it contains a very small supply of the larger fish which were formerly obtained from the lake.

Your Commissioners consider the principal causes of this are not far to seek. By the regulations gazetted in April, 1885, the mesh of the nets allowed to be used was 4½ in., but this was lowered to 4 in. by regulations of the 10th January, 1888, and these are the regulations now in force. On inspecting the nets actually in use in the lake we found few with mesh that exceeded 4½ in. These nets will take the yellow-belly and black flounders, which are the predominating varieties, from 8 in. and upwards, measured over all—that is, from the tip of the snout to the end of the tail. The so-called “three-corner” flounders of less length than 8 in. are taken by such mesh.

A second cause of the depletion of the lake is excessive fishing. There are about twenty boats on the lake, and each of these boats has nearly two miles of set-nets for flounders.

Making all allowance for nets that are being mended or are ashore for cleaning and other purposes, your Commissioners think that at least twenty miles of netting are set every day in the year for the purpose of taking flounders from the lake. Mr. Durant, the President of the Fishermen's Union, in his evidence, states that there are twenty-one boats engaged in fishing on the lake, and that each boat averages four cases, containing each about twelve dozen, per day. We think this estimate very excessive; but, even if half the number stated by him were taken by the fishermen—viz., two cases to each boat, of twelve dozen per case—the daily take would amount to over 6,000 flounders. The actual number taken can, perhaps, however, be more nearly obtained from the examination your Commissioners made of the books of the fish salesman to whom the flounders are forwarded for sale. We find the actual number of cases forwarded to him from Lake Ellesmere as the take of eighteen boats in sixty weeks, from the 2nd January, 1892, to the 3rd March, 1893, amounted to 5,785 cases, or an average of $96\frac{5}{12}$ cases per week. To this must be added the number of cases sold locally, which your Commissioners were informed would amount to about twenty cases per week. This would make the total take per week equal to from 116 to 120 cases of about twelve dozen each, or over 17,000 flounders per week.

It is evident that no enclosed water like Lake Ellesmere can stand this drain on it without showing signs of depletion. The evidence also shows that the flounders bred in the lake go out to sea in large numbers when the lake is let out; and, as the lake is now let out more often than formerly, at an unseasonable time of the year, this is another cause of the depletion. To enlarge upon this may be judicious. By the evidence taken it is plainly shown that the flounders of Lake Ellesmere are gradually becoming acclimatised to a different state of existence from that appertaining to the bulk of flatfish in other New Zealand waters, and are deteriorating fast, depreciation being enhanced by the palpable overfishing.

With the exception of the so-called black flounder, the whole of the observed New Zealand flatfish come from the sea into the shore shallows and estuaries, enclosed harbours, bays, or mouths of rivers to the brackish waters, for the purpose of depositing their spawn, or for change of food, &c., at more or less regular periods of the year, usually the spring and summer months. When fresh run from the sea or caught in the sea itself they are much finer and better flavoured fish. After a short existence in the brackish or fresh water the fish lose their condition and flavour, becoming lank and lean. The black flounders reverse the order of affairs, living up the fresh-water rivers, and coming down to the saltier waters in autumn and winter. Great numbers of lagoons in New Zealand of very inconsiderable areas as compared with Lake Ellesmere have the same causes operating. When left in a state of nature their filling-up and bursting-out to sea depends on the changes of the seasons, and the openings thus made chiming in with seasonable migratory movements of the flatfish (whether caused by sexual or food motives), give them an opportunity of running in, as adult fish, to counterbalance the loss of the small fish previously hatched in the periodically enclosed waters, which avail themselves of their opportunity to go out to sea, returning when mature in the ordinary course, thus keeping up the natural supply and preventing depletion. What has happened in smaller enclosed waters too long retained is happening on a larger scale at Lake Ellesmere. Gradually the large parent fish have been captured, and the catch has rapidly decreased. The mature size of the fish, from its altered condition of life, also decreases, prime operating causes being the almost fresh water it perforce has to inhabit, at a mean temperature of 10° greater than the sea, and deficient supply of food. The evidence of the fishermen notably proves that the yellow-belly flounder is a much longer and thinner fish in proportion to its width when taken in Lake Ellesmere than the sea- or estuary-caught fish of the same kind. Whilst it is universally acknowledged as having far less flavour, the so-called "three corner" flounders found in the lake are now so permanently dwarfed, according to the fishermen, as to be recognised as not now worth catching, whilst the sea-fish of the same kind assumes almost the largest dimensions of flatfish caught. Seasonable opening of the lake, when the run of mature fish is on, from the sea will prove beneficial without doubt to subsequent supply of fish of better quality and flavour.

Your Commissioners are of opinion that no flounders should be allowed to be taken either in Lake Ellesmere or elsewhere under 10in. in length, and that the size of the mesh of the nets used should not be less than 5in. Your Commissioners are of opinion that, if the interests of the public and of the fishing industry only were to be considered, *a still larger mesh and size of fish* should be fixed, but, having regard to the interests of the fishermen, and knowing the difficulty they would have to obtain a living from Lake Ellesmere if the limit was fixed at 11in. or 12in. as the minimum size at which flounders should be taken, they make the recommendation as above.

We are of opinion that the average earnings of the fishermen on the lake do not exceed £1 10s. per man per week. The evidence shows that the nets in use last about six months, though one fisherman says, with care, his nets last eighteen months. We recommend that, if the suggested alteration is made in the size of the mesh, twelve months' notice should be given to the fishermen. We see no reason why the same size of mesh should not be fixed for the whole of the South Island, or at least for the whole of Canterbury, and strongly recommend that such size be adopted for all flounder-nets.

We are of opinion that all nets, of whatever sized mesh, should be hung on the square, and not on the diagonal. If hung on the diagonal, and weighted, the mesh is pulled together, and practically becomes a net that will take anything. We found all the nets at the lake hung on the diagonal.

Your Commissioners find that the fisheries are carried on and fish sold practically without any supervision, and they are of opinion that as long as this continues much destruction of undersized and immature fish will occur, particularly where drag- or seine-nets are used, and emptied on the land; but even with these kinds of nets the hanging of the mesh in the way proposed will prevent a great deal of the destruction of undersized fish.

The fishermen have expressed their willingness to pay a reasonable license-fee to defray the expense of an inspector, and your Commissioners are of opinion that such an appointment would be very advisable, and conducive to the welfare of the fisheries industry.

The fishermen on Lake Ellesmere are desirous of using herring-nets of 2½in. mesh; but your Commissioners cannot recommend this unless under very close supervision, and with the proviso that such nets must be hung with meshes on the square, and so as to allow a free open space of at least 2ft. between the lower margin or lead-line of the net and the bottom of the lake.

In the interests of the consumer and the fishermen, though but indirectly bearing on the subject of the inquiry, your Commissioners are of opinion that any assistance or advice that might be given towards the establishment of proper fish-markets in the larger towns of the colony would be beneficial to the State.

We have, &c.,

W. H. SPACKMAN.

F. E. CLARKE.

The Hon. the Minister in charge of the Marine Department, Wellington.

MINUTES OF EVIDENCE.

CHRISTCHURCH, 6TH MARCH, 1893.

Mr. E. G. Wright, M.H.R. : My attention was called to the matter by seeing a large number of immature flounders being brought into the market, and the difficulty of obtaining a supply of fish worth cooking. I remember only a few years ago—say, ten years back—the flounders were

much larger and cheaper. In my opinion, judging by results, the lake has been largely depleted, and the remedy to prevent it would be to increase the size of the mesh to 5in., and not to allow flounders to be taken under 10in. I think this should be the universal regulation. The urgency as regards Lake Ellesmere is because that lake has suffered, in my opinion, by excessive fishing. The fish are more easily taken in Lake Ellesmere than in the bays round the coast, and because it is a confined water, it is probably the best breeding-ground for fish. A weak point in the regulations is that, while the Collector of Customs is nominally charged with seeing the fishery regulations are being carried out, he has no time to attend to a duty of this kind; and what seems necessary is that an inspector should be appointed for this special duty, both in the interests of the public and of the honest fishermen. The undersized fish brought to market, as a rule, are immature fish, and the flesh is tasteless. I have seen them in the market as small as 7in. in length, whereas fully-grown flounders attain the length of 15in. or 16in. In my opinion, Lake Ellesmere, from its extent, and the absence of voracious fish that would devour the young flounders, is a most valuable breeding-ground, and the industry properly nursed would produce a very large supply of good fish-food for the public. I would like to refer the Commission to the report of the Fisheries Commission in London, that a well-preserved fishing-ground such as Lake Ellesmere is of more value as a food-supply for the public than an equal area of the best agricultural ground devoted to the production of beef or mutton.

Thomas William Durant (merchant, Leeston): I am well acquainted with the fishing industry at Lake Ellesmere. I am President of the Canterbury Fishermen's Union, registered under the Industrial Societies Act. The union comprises fishermen from Lake Ellesmere, Lyttelton, Akaroa, and Kaikoura. The object of the union is to improve the fishing industry of Canterbury, and particularly of Lake Ellesmere. The number of members is about a hundred and twenty, of which about forty are fishermen deriving their income and working at Lake Ellesmere. The number of boats used is twenty-one at the lake alone. Each boat has about twenty nets, of about 85 fathoms each. These nets are some of 4½in., some of 5in., and some of as much as 6in. We have also drag-nets of 4in., one to each boat, from 50 to 60 fathoms in length. For the carriage of the fish from the lake to Southbridge, Leeston, Lincoln, Greenpark, and Kaituna there is a horse and trap for each boat. The boats are from 14ft. to 24ft. long, and 5ft. to 6ft. beam, and most of them are half-decked, with centre board. We estimate that each boat takes an average of four cases per day throughout the year. A case averages about twelve dozen, and weighs about 56lb. The largest takes are from October to March. The flounders spawn in spring, August, September, and October, and are in best condition when they are spawning. There is no close season for them, and we take them all the year round. A carrier contracts with the union to bring the fish to Christchurch daily, where they arrive at half-past 7 a.m. They are then submitted to auction by an auctioneer employed by the union. The union rents the market, with conveniences. In summer months, when the flounders are plentiful, they average from 5s. to 10s. per case; and in winter from £1 to £1 15s. per case. They are sold direct at these prices to the fishmongers, hawkers, and dealers. The average size of flounders obtained is from 9in. (the limit) to 10½in. over all. At the present time in a case of flounders probably half would be not under 9in., and a half over that size—viz., varying from 10in. to 10½in., and a few over 10½in. In the winter a few cases of black flounders are caught; these would average 12in. to 15in. Before the last two years the lake was let out twice during the year, but the last two years only once a year. The most favourable time for the fishermen to have the lake let out is about May or June. Where the lake is let out is the best spawning-ground for the fish, and here the spawn and young fish can be seen in large numbers. If the lake is let out later than this the spawn and young fish are swept away with it, and there is a very great decrease noticed in the size and quantity of fish caught. This decrease was very noticeable some two or three years ago, when the lake was let out twice in the year. The lake was open then for three or four months each time, and flounders became very scarce. We reckon it takes from nine to ten months for a flounder to attain the size of 9in., and three months longer to attain the size of 10in. From the point of view of the fishermen flounders would be more plentiful if the lake was not let out at all, because directly the lake is let out the flounders go out to sea in large numbers. Just where the opening has been, after the lake is closed up, we get most fish. The fish are not graded according to size when put in the cases, but are put in indiscriminately. There is no inspection of fish at the lake by the Collector of Customs, or any Government official, or inspection of nets, but there is a heavy fine imposed by the union for the fishermen taking or selling or destroying undersized fish. The fishermen would be very much in favour of having such inspection, to prevent catching and selling fish under size, as this is done by some persons fishing on the edges of the lake in the shallow water, and the fish caught retailed throughout the country; and these are the individuals who take trout from the lake in large quantities, and sell them in the same way. These men use any kind of mesh they may happen to have. For set-nets, the best size, in our opinion, is 4½in., and these take flounders both of 9in. and above. A 4¼in. mesh would take few 9in. flounders, and a 5in. mesh scarcely any at all. There has been an increase in the number and size of flounders during the last two years, and, in our opinion, this arises from the lake not having been opened so often. By the regulations we are not allowed to use herring-nets. There is a very large quantity of herrings in the lake in the winter; twenty cases per day per boat have been caught. The herring-nets we want to use are of 2¼in.-mesh floating-nets, and these, as they float above the ground, would not interfere with the flounders or trout; and in so small a mesh neither flounders nor trout would become entangled. The average earnings per boat per week, taking all the year round, would be about £7 10s. This is divided into three shares—one share for the boat and gear, and one for each man. The fishermen desire to obtain permission to use the herring-nets. It would be an advantage to have every fisherman holding a license at a small fee, and we have suggested that to the Government already. The nets only last about six months, and cost £1 10s. If the Government make any regulations we think they ought to be universal, as otherwise our fish would be brought into competition with those brought from the seaboard. The Inspector of Weights and

Measures attends the fish-market at Christchurch two or three times a week. It is not advisable to allow the use of a beam-trawl, and it is doubtful whether it could be used, on account of the number of stumps in the lake.

W. F. Warner (hotelkeeper, Christchurch): The flounders I can obtain in Christchurch are far too small for consumption. My opinion is that these small flounders are immature, and are taken before they have spawned. Unless I get them from Sumner, or New Brighton, or Akaroa I cannot obtain any fit to put on the table. I find the fish I get from Lake Ellesmere not fit to put upon the table. I certainly consider that the minimum size should be increased to at least 10in. There is a much greater demand now for flounders than there used to be, and more fishermen are employed catching them.

7TH MARCH, 1893.

Sir John Hall: I would suggest that the Commission should not take it for granted that the supply of flounders has decreased; I have never had any proof that the supply has diminished. The fact of small flounders appearing in the fishermen's shops is no proof that large ones are not to be got. It rather shows that the existing law is not carried out. This is the fault of the Administration. If the supply has diminished, the Commission will not take it for granted that the size of the mesh is the cause without further inquiry. I have given much attention to the subject during the last five years, and the information which I have gathered leads me to believe that it is rather the frequency with which the lake is let out which tends to the diminution of the size and the quantity of the flounders. The fact is that the flounders have not time to grow to a large size before the lake is let out, and they are swept into the sea. Practically, very few of them return to the lake. Another cause of the diminution of supply is that the lake is let out in immediate proximity to the favourite spawning-beds, and at a season when the spawn has been deposited; the consequence is that the outrush of water carries a large quantity of spawn with it. I really believe these two causes have more to do with the diminished size and supply, if it exists, than any other. The particular spot at which the lake was let out was brought by me under the notice of the Government, and another place was suggested at which the lake could be let out without damage to the spawning-bed. The Selwyn County Council inquired into the matter, and the Chairman, Mr. David Macmillan, agreed that this would be an improvement. The Railway Commissioners, who let out the lake for the protection of the Little River Railway, declined to make any change, because it would make an additional expense of about £30. I would like to draw the attention of the Commissioners to the difficulty of applying a different rule as to the size of the flounder to different localities that supply the same market—that is, to allow one sized fish to be caught at Lyttelton and Sumner and another size at Lake Ellesmere. If undersized fish were found in the fishmongers' shops in Christchurch they would be said to come from Lyttelton or Sumner. I have received a letter from Mr. Sullivan, of Dunedin, giving the opinion of the Dunedin fishermen regarding Mr. Wright's flounder Bill, which I think well worthy the attention of the Commission, and I herewith hand it to the Commissioners for their perusal. I would also like to call the attention of the Commission to the facts that by the Treaty of Waitangi, and the deed of sale of this part of the Middle Island, the Maoris are guaranteed in the undisturbed possession of their fisheries. I am informed that the Maoris at Taumutu depend in summer very largely on the fishery for their subsistence, and in the winter almost entirely so, and I submit, therefore, that the Government should be exceedingly cautious not to do what might be held to be an unreasonable interference with the fishing-rights of the Natives. At page 15 of the printed correspondence there is a petition from the Natives at Taumutu on the subject. I would submit that what appears to me to be required is some actual supervision of the fishery; at present, the only supervision is an occasional visit by the police constable. I believe it would be well worth the while of the Government to appoint an inspector to look after the fishery industry in Canterbury. The Lake Ellesmere fishermen have expressed their willingness to pay a moderate license-fee towards providing the salary of such an officer; unless something of the kind is done it is of no use altering the law. The fishermen, as a whole, are a steady, well-conducted set of men, and would, I believe, be glad of the appointment of such an officer.

R. G. Warnes (fishmonger, Christchurch): I bring herewith six exhibits of flounders. Exhibit No. 1 is from Lake Ellesmere, and is 9½in. long; Nos. 2, 3, 4, 5, and 6 were caught in Lake Ellesmere by Peter and Matthew Alec. The black flounder (No. 7) is from Sumner. I think flounders are allowed to be taken much too small. In my opinion, they ought not to be taken of a less size than 11in. or 12in. I get my chief supply of flounders from the Lake Ellesmere. They seldom run over 10in. The great bulk of them—say, three-fourths of them—are under 10in. We get the largest flounders from Lyttelton, and occasionally New Brighton Beach. In the case from which No. 1 was taken I do not think more than two dozen were larger than No. 1. The flounders vary in price. In summer time, when they are plentiful, they would probably run from 6s. to 10s. per case; and in winter, when scarce, from £1 to, occasionally, £2. My experience during the last few years is that the flounders coming from Lake Ellesmere have been gradually getting smaller, so that now the great bulk of them are very small. The smaller the flounder the less flavour it has. Sometimes, as regards the black flounders from Lake Ellesmere, the roe is half the fish. The flounders taken in the sea are more solid and better flavoured than those coming from Lake Ellesmere. Formerly we used to get a large supply of good flounders from the lake, but we do not do so now.

Professor Hutton (Christchurch): I would like to say that what might be useful and necessary for Lake Ellesmere would not be suitable for open-sea fisheries, as there is no question of exterminating flounders in the open sea, but in Lake Ellesmere it is quite a possibility that they might be exterminated altogether, so that the remarks I wish to make apply to Lake Ellesmere only. I find there are two species in Lake Ellesmere—the common flounder, or patiki (*Rhombosolea monopus*), and the black flounder (*Rhombosolea retiaria*). The common flounder is often found in rivers, but I never heard of the black flounder being found in fresh water anywhere but in Lake

Ellesmere. No doubt a large number of flounders go to sea when the lake is open, but these probably die, as they could not live on the shingle. They would not return to the lake. All that go out are mere waste. These Lake Ellesmere flounders are not sexually mature until they attain about 12in. in length. It seems to be necessary, therefore, to retain some fish of this size in the lake, and I would suggest whether some part of the lake could not be reserved, and not allowed to be fished at all; there would then be always some supply. The question of the size of the flounder to be taken seems to be quite separate from the question of extinction. The length of the flounder is about twice its breadth, so that a 4in. mesh would take every flounder over 8in., and would also take a number of smaller ones which would become entangled. I do not think the size of mesh should be less than 5in., as this would take every 10in. fish. The great thing to guard against is the killing of fish which are too small to be sold, and I would advocate a 5in. mesh to prevent the waste of small fish. If the mesh is such that it takes every fish of legal size, there must be a number killed under the legal size. I think it would even be better to have a larger mesh, and allow them to sell all they catch; so that 5in. is the very least that should be allowed. I think that places reserved, and not allowed to be fished at all, would be better than a close season for flounders.

Rev. A. Chodowski (Jewish minister, Christchurch): My congregation use much fish. The flounders brought to my house for sale are very small, and I consider them unwholesome, and not nutritious or fit for food. In my opinion, the sale of flounders 9in. and less in length should be prohibited, for the following reasons: First, in my opinion, this species of fish, though when sufficiently developed, a very nutritious and edible fish, eaten so small is unwholesome; secondly, if taken under 9in. must necessarily prevent their natural and sufficient increase. Flounders are often brought to my house of very small size by some of the hawkers, as small as 3in., 4in., or 5in. long; these are ill-flavoured and immature. I think 9in. the very least size that should be allowed. I have seen very small flounders brought round and sold at twelve or fifteen for 1s.; these would be 3in., 4in., or 5in. long.

Joseph Germano (fishmonger, Christchurch): I am a fishmonger, and have been in Christchurch in business for about fourteen or fifteen years. I am of opinion that 9in. is too small to allow flounders to be taken. In my opinion, they ought not to be taken under 11in., and the mesh not less than 5in. or 5½in. I go and buy my flounders at the auction, and in the six months in the summer they go at about 11s. or 12s. a case, and in the winter £1. The general size of flounders from Lake Ellesmere is about 10in. to 10½in. I think a minimum of 11in. would be fair to all persons, both consumers and fishermen. I do not think a 9in. fish is mature, but is too young to breed. Most of the flounders brought into the market come from Lake Ellesmere. Only a few flounders are obtained from the sea during the summer months. The best-flavoured flounders are from the sea, but the black flounders from Lake Ellesmere are better even than those from the sea.

LEESTON, 8TH MARCH, 1893.

Nicholas Bassi (fisherman, Lake Ellesmere): I have been fishing on the lake twelve years. My experience of the lake is that I could not get enough flounders to make a living out of it if the size at which they may be taken is made greater than 9in. I get smaller flounders now than I used to two or three years ago. I account for this—(1) on account of the lake being opened more often than formerly; (2) through not trying to catch the larger fish. I reckon that I get about five or six dozen every day all the year round. They run in size from 9in. to 13in. or 14in. Two-thirds of these would be from 10in. to 11in., and the rest larger. I do not belong to the Fishermen's Union, and I take my own means of selling and distributing the fish. At the present time they are more plentiful than they have been for the last three years, and I attribute that to the fact of the lake having been let out only once a year for the last two years, whereas it used to be let out twice a year. The best spawning-ground is down near the mouth; and I suggest that this part of the lake should be protected, especially about October, when the fish are spawning. I consider May and June to be the best months for letting out the lake. The passage from the lake to the sea was open during the last two years for a period of only about four weeks each year. In 1892 it was opened in June and blocked in July, and in 1891 it was opened in August and blocked again the same month. When the lake was not let out for the purpose of the Little River Railway there was a more plentiful supply of flounders than now. The oftener the lake is let out the worse it is for the fishermen. In my opinion, any net below 4½in. takes flounders that are too small. A 4½in. mesh would take a few flounders of 9in., but the majority of them would be 10in. or 11in. If a 5in. mesh were used, in twelve dozen flounders, perhaps a dozen would be 10in. and the remainder 11in. or 12in. A 5in. mesh would let all the 9in. flounders through. I use none less than 4½in. and up to 6in. I have twenty-two nets, fourteen of 90 fathoms each, 4½in. mesh, and eight nets 6in. mesh, of 80 fathoms each. With these nets I do not take more than an average of five dozen flounders per day, taking all the year round. A net 90 fathoms long costs £1 10s., ready to use. The nets last me, as a rule, about eighteen months. In my opinion, drift-nets ought not to be used because they destroy the spawn and young fish. I do not sell my fish by the case but by the dozen, and they average to me about 2s. per dozen, taking all the year round.

9TH MARCH, 1893.

D. Macmillan: I am Chairman of the Selwyn County Council. I have been well acquainted with Lake Ellesmere from 1863 to 1868, and again during the last six years. When I was living near the lake, in 1863 and subsequent years, we were supplied by the Maoris with flounders both of better quality and larger than they are now. About one-quarter of the flounders caught years ago would be black flounders. There were no professional fishermen there then. I attribute the small size of the flounders now to excessive fishing. I think no flounders ought to be taken under 10in., nor ought any net to be used that would take flounders of a less size than 10in. Years ago the lake was not let out so frequently as it is now. The flounders were caught both with nets and at

the mouths of the creeks with spears. The black flounder, in my opinion, was more plentiful than now. The leaseholders on the borders of the lake used to arrange with the Maoris to let out the lake. It was then generally let out in the spring. Since the Little River Railway was made the lake has never been allowed to get so high as formerly. There is a drainage district for the Halswell part. The great difficulty is to get an outlet for the water, owing to the lake backing up; and the Selwyn County Council are advising the Government to create a drainage district that will include the whole of the land affected by the lake, including the outlet. From inquiries made we consider that the lake can be prevented from keeping so high as at present, and this would have the effect of keeping it at a more uniform level. Some years ago I went down and met the fishermen on the ground, to consider the possibility of having the opening at a different place, so as to prevent the loss of spawn and young fish which they represented as occurring through the lake being let out through the present outlet. We selected the point which they considered would be advantageous, about a mile to the east of the place where the opening is made now. Since then I have had the opportunity of inspecting tracings prepared by the Railway Department, showing the soundings and depth of the lake in the immediate neighbourhood. There is a deep channel from the present opening running east, along the point known as Fishermen's or Low Point, but opposite the proposed place of opening is comparatively shallow, and consists of shallow water, and I do not think it would be of any use opening the lake at the proposed new place unless this proposed new opening is connected with the deep channel. There are about 20,000 to 24,000 acres of Crown land affected by the rise and fall of the lake. Part of this acreage would always be subject to the rise and fall of the lake, but not more than, say, 10,000 acres.

Nicholas Bassi (further evidence): The flounders come out of the mud in the beginning of September. In October they are shifting down towards Taumutu, and breeding there. They are there for two months. I find them in full roe in October, and in November none. After November I find them all over the lake, and so till the month of April. The largest fish I get are near the shores, on the clear bottom, and the smaller ones in the middle of the lake. When I first knew the opening, eleven or twelve years ago, it was shallow water where it is now deep, but the depth has been occasioned by the flow of water through the channel to the sea, and, in my opinion, the same effect would be produced by letting the lake out at the proposed new place. In my opinion, there ought to be supervision of the fishery so as to prevent the destruction of small fish. Within my knowledge the channel leading to the present opening has never been blocked or made smaller by shingle washed into it over the spit from the sea. I think the fishermen ought to be allowed to use the floating herring-net of 2½ in. from April to September. I do not think these nets would interfere with the flounders or any other fish. I think a limit ought to be put on the quantity of fish taken by each fisherman. Twelve years ago the fishermen used to employ only eight or ten nets, now they have from twenty to thirty nets. I would limit the daily average of fish to be taken by each fisherman to twenty-four dozen. I think it is possible, in case of a glut, to keep flounders alive in pounds. I have not found them difficult to keep in the well.

John Stretz (fisherman, Lake Ellesmere): I have been engaged fishing at the lake for the last twelve years. I began working with set-nets, 4½ in. to 4 in., and I used to work about 20 yards from shore, and we used to catch flounders from 9 in. up to 11 in. We began working from September till July. After July used to work in deeper water, in the mud, say two miles from shore. There we caught flounders from 9 in. to 10 in. Then we used to go to Taumutu and work drag-nets of 3½ in., catching flounders running 9 in., 10 in., and 11 in. These fish were full of spawn. After November the fish used to go back towards the Selwyn for feed. At the present time we cannot fish close to the shore owing to prevalence of water-grass; now we can only fish, say, two miles from the shore, and the fish we catch are from 9 in. to 10½ in., with a few larger. I think large fish could be caught along the shore were it not for the weed, and in larger quantities than the small ones we get from the mud. The weed has increased considerably of late years. I do not think the present channel would silt up if the lake was opened in another place. I have had some experience of flounder-fishing round the coast at the Pilot-station, Port Levy, and other places. At these places I caught few flounders, say, about twelve dozen a week. These were caught in the drag-net. There are less flounders caught now at these places than when I was fishing there. I think herring-nets of 2½ in. should be allowed to be used from 1st May to 1st September. Nine or ten years ago we used to be able to send one hundred cases a day to market at 10s. to 12s. a case. Then there were only eleven or twelve boats working, with nine to twelve nets each boat. Every year since till 1889 they were getting less and less. Since the lake has been opened less frequently the flounders have slightly increased. Now we are sending thirty to forty cases of flounders, and there are about fourteen or fifteen boats with eighteen to twenty nets, and five or six boats with eight or ten nets. I think the flounders grow about 5 in. or 6 in. a year. The average sized fish I have seen with spawn would be 9½ in. to 10 in., but I have never seen spawn in fish less than 9 in. long.

Alexander Lazaretti (fisherman, Lake Ellesmere): Have been fishing for twenty years on the lake. Have not fished anywhere else. The flounders are not as numerous now as they used to be twelve or thirteen years ago, as then the fish died. Could not catch two dozen a day. Previous to that time the lake was occasionally open. About that time the Little River Railway was constructed, and the lake was kept open for nine months. The reason was, the lake became so shallow from its being constantly open that the water was much rougher when strong breezes were blowing, and the disturbance killed the flounders and other fish. At this time we caught more dead fish than live ones in our nets. The tidal changes drove the dead fish into the nets. Some were putrid and smelt very bad. Since that time the fishing has recovered, every year more fish being taken, and the fish increased in size as well as number. The fish caught about eleven years ago were very small, from 7 in. to 8 in. and 9 in. only. You could catch a few large ones with the drag-net to put on top of the case. Average catch three years was two cases to a boat. Average catch at present time, say, three cases to a boat all the year round. Fish were generally smaller three years ago.

Used a 4½ in. mesh then, use 4½ in. to 5 in. mesh now. At the present time the best feed is found and the best fishing-grounds are the flats, No. 1 River to Halswell River, not far out from shore, say, quarter of a mile. Only catch good fish in shore there now, and along the Ninety-mile Beach side of the lake. It would improve our fishing to increase the size of the mesh a little during the summer fishing. All fish would die in small mesh if left down too long in consequence of rough weather. This would prevent too large a catch of the smaller fish, preventing glutting of the market, and consequent waste of fish. I do not think the lake flounders go out to sea. Have seen them coming in from the sea, but never going out. Years ago the fish used to spawn at the Maori pa. At the present time I think they spawn all round the lake alike. Get much less for flounders now than ten years ago. Use two miles of nets—that is, twenty nets. Nets last, if no rough weather, twelve months. My nets cost me only 10s. for the eighty-fathoms length; one mile, unslung, costs £2 17s. 6d.; slinging costs £3; altogether, say, £5 10s. per mile. Nets, if locally bought, would cost probably double as much. Have been down at the outlet when lake running out many times. Have only watched herrings and eels going out; have not seen any flounders. Was the first man who lived down there at the outlet. The average netting to each boat is a total length of about two miles.

Charles Johnston (fisherman, Lake Ellesmere): Have been fishing at the lake for fourteen years. Was never fishing in any other part of the world. Whole experience has been gained in the lake. Present average catch about two cases per day. Am satisfied with present size of mesh. Could not improve on it. Think that the more frequently the lake is opened the less flounders are to be obtained. Have lived at the opening from twelve to fourteen years. Have seen numbers of small flounders going out to sea when the lake has been open. The neighbouring farmers are catching a great quantity. My opinion is that fish spawn near present outlet at end of lake. Would be much better for flounder-fishing industry if the lake was permanently blocked. Have seen flounders spawning in other parts of the lake. Think the greater number spawn at the outlet end, because the most of the fish we catch there are full of spawn. We call the flounders we get in greatest numbers the yellow-belly. The smallest yellow-belly I have seen in spawn was about 6 in. in length. In spring a great many 6 in. fish in spawn. Black flounders are in spawn in June, July, and August. Have seen yellow-bellies in spawn in September, October, and November. Very seldom catch "three-corner" flounders over 9 in. Have never been aware of any small fish being kept in manure. Our daily number of nets spread averages about fifteen. Nets usually costs £1 12s. 6d. per 80 fathoms. Earnings average over £2 per week.

John Magaldo (fisherman, Lake Ellesmere): Have lived at and been fishing at lake for seventeen or eighteen years. No experience anywhere else. Quite satisfied with size of mesh. Have no nets less than 4½ in. mesh. Flounders are increasing in the lake. Have seen both large and small flounders running out of the outlet. Am satisfied with present system of measurement of mesh.

CHRISTCHURCH, 10TH MARCH, 1893.

Dr. Frankish (Christchurch): Some years ago I was delegated by the Acclimatisation Society to see the Colonial Treasurer with respect to legalising the size at which flounders should be taken. It was agreed that Government should be recommended to insist that no flounders should be taken under 9 in. This was on account of my having seen a very large number of flounders wasted owing to their small size. Some three years ago all the maritime powers sent delegates to London to a congress to protest against undersized sea-fish being sold. I suggest that flounders should not be allowed to be taken under 10 in. in length from snout to root of tail; that the size of the mesh should be 6 in., certainly not less than 5½ in. A close season for four months this year—September to December—seems highly desirable, if in the future we are to have a good supply of flounders from Lake Ellesmere, those four months covering the spawning-season. I also suggest that the spawning-ground within the lake and close to the Ninety-mile Beach should be pegged off, and never fished in the future. Drag-nets should be prohibited except during the first eight months of the year. I think the 2½ in. set-nets for catching mullet quite safe as against flounders if set so as float. The appointment of an inspector to see the law carried out is imperatively necessary. I have seen flounders coming into the lake many years ago with other fish, and I have caught sea-fish in the lake.

Edmund Pleasant (mariner, Lyttelton): I have had several years' fishing experience at Lyttelton. I have seen in the evidence given on Monday last that the boats on Lake Ellesmere are making £7 10s. per week on the average. I am certain they are not doing so. It also states there are twenty-one boats, which would represent forty-two men working. There are not so many as that on the roll of the union for Lake Ellesmere. I was President of the Union when it was first started. I do not think there are more than twenty-five men there altogether. The statement also is incorrect that they average four cases a day per boat. I think the proper number should be less than twenty cases per day for the whole. In November, 1891, the estimate for the whole of the union for eight months' work was about £2,300, and this included Lake Ellesmere, Lyttelton, Sumner, and some fish from Wellington. I think the average earnings of each boat per week would be less than £4. I do not agree with Professor Hutton's statement that the flounders that go to sea cannot return to the lake. If they do not return they thrive better in the sea, and are often caught at Lyttelton and Akaroa. The fishermen are able to tell the flounders that have been bred in the lake. There are two auctioneers, one for the port and Sumner, and one for the lake. I think that half the fish-supply for Christchurch comes from Sumner and Lyttelton, and half the value of the whole supply. In the summer few flounders come to Christchurch from the port and Sumner, but in winter most of, and the best flounders come from Lyttelton and Sumner. A case of flounders in the winter from Lyttelton or Sumner would fetch double the price—say, £2—that these would from Lake Ellesmere. The yellow-belly is the commonest flounder found in the lake. More black flounders are caught in Lake Ellesmere than in the sea. The "four-corner" flounder is

caught at Lyttelton and Sumner of large size, sometimes as much as 18in. I think it is to the benefit of the flounder to have access to the sea, and those doing so are of superior flavour and size. The young flounders are chiefly destroyed by the drag-net. They are hauled ashore on the beach, the catch with same containing more than half, on the average, of undersized fish, which are left to rot. In order to escape catching small flounders, I think it is not safe to use the 2in. herring-net, even when floating, unless there is a space left at the bottom of 2ft. at least. There are no floating-nets used at Lyttelton or Sumner. The total catch of flounders from Lake Ellesmere during last winter did not average above six or seven cases a day. I know this through being a fish salesman. An inspector is very necessary to prevent the hauling the nets ashore, as this is done commonly at present. I have seen as many as thirty dozen small fish hauled up and left on the beach at one haul, and none of them put back again. To my knowledge no fines have been inflicted by the union on the union fishermen for taking small fish, or on any other account.

LYTTELTON, 11TH MARCH, 1893.

Henry Piggott (fisherman, Lyttelton): Have been engaged in fishing at Lyttelton for seven or eight years; also at Moeraki, Port Chalmers (five years), Kakanui, as well as other places. I do not think it advisable to have any particular limit for the meshes of the nets for Lyttelton or other seaports, as we fish for different kinds of fish, such as garfish, trevalli, kahawai, and flounders. These are the principal fish taken by nets. The nets we are using for flounders are 4½in. to 5½in. Sometimes we catch a good many flounders. A 4½in. mesh will take a 9in. fish. I was fourteen months at the lake. I am not in favour of emptying the net in the water, as sometimes it is impossible through there being too much sea. I think there are very few destroyed through emptying the net on shore. The fishermen, for their own benefit, return them to the water. I fish chiefly in the harbour with seine-nets. At the present time for garfish chiefly. May and June are about the most plentiful months for flounders, but we get them all the year round. The fishermen can tell the difference between flounders that have come from Lake Ellesmere and those bred in the sea. We occasionally catch a black flounder. In the spring and summer months they come up the rivers and creeks. I do not think the flounders that leave Lake Ellesmere perish, but they improve in the sea. The yellow-belly that we catch that comes from the lake is a shorter and thicker fish than those bred in the sea. The salt-water fish are the best flavoured, and we get more for them than those that come from the lake. Both here and at Port Chalmers the yellow-belly spawns in October and November. Flounders always come to their different breeding-places. Flounders do not go to sea to spawn. I have not seen any flounders of less than 9in. in spawn. Flounders grow quickly. There are about eight boats working in Lyttelton, with two men to each boat. There are also two fishing-cutters belonging to Mr. Warnes fishing in the different bays as far as Akaroa. Probably ten boxes or more of flounders would go from Lyttelton per week. I was on the lake for fourteen months about four years ago. I do not think I averaged £1 per week.

Robert Seymour (fisherman, Lyttelton): I am secretary of the Canterbury Fishermen's Union, Lyttelton Branch. There are over sixty members of this branch, though they are not all always engaged in fishing. The reports and minutes of the whole of the union are under my control. No fines have been inflicted on any member for taking small fish. There is some loss by the drag-nets being emptied ashore, but it would be impossible in some places to empty them in any other way. Most of the fishing is by drag-net in the summer, but in winter they use set-nets. The set-nets used here for flounders are 4½in., 5½in., and even occasionally 6in. I think a 5in. mesh for flounders is the most beneficial for the fishermen for getting good, saleable fish. This is applicable both to the port and the lake. There is not a large number of flounders taken at the port, but they command a better price than the lake flounders. I should think from what I know that an average of £7 10s. per week per boat is an excessive estimate: £2 10s. to £3 would be the cost of our set-nets, and they would be from 50 to 70 fathoms. The flounders that leave the lake are not destroyed, but improve in the sea. They can be easily told from those bred in the sea. Less than half the total fish-supply comes from the lake. As regards the seines or drag-nets, what would apply to the lake would not apply to the port, as here we have to fish for other fish not caught in the lake, such as trevalli and garfish, and, occasionally, sprats.

John Williams (fisherman, Lyttelton): Have been fishing here, off and on, for twenty-six years. We use for set-nets for flounders nets from 4½in. to 5½in. I consider not less than a 5in. mesh should be used for flounders both here and elsewhere. All the nets here are hung on the diagonal. I think a 10in. flounder would go through a 5in. mesh, although it would also catch, occasionally, smaller fish. A flounder under 10in. is very small, and not much good for food. The black flounders that we catch come from the lake. I was fishing on the lake sixteen years ago. The flounders were much larger then and more plentiful. There were then only two or three boats fishing, and the lake was opened less frequently. If the lake was opened in the winter the flounders did not go out much, but if in the spring they went out in great numbers. I have seen them also coming back just as thickly. Occasionally a Customhouse officer comes round—say, once in three months. He never comes when we are netting, but only to see what fish we bring in. All our nets are hung on the diagonal.

William Fitzsimon (fisherman, Lyttelton): Have been engaged in fishing, on and off, for twenty-five years. We only use set-nets for flounders in the winter, and the mesh of these ranges from 4½in. to 6in. I think a 5in. mesh, or even 5½in., is the best size to obtain good marketable fish, and is most beneficial, both for the fishermen and the public. We can always get a better price for port fish, as they are larger and better flavoured. A good few flounders are caught here in the winter. We can tell the flounders that come from Lake Ellesmere, as they are longer and narrower than those bred in the sea; but they soon improve. The fish that come out of the lake do not die, but live in the sea, and improve. The average flounder taken in the set-nets would be about 11in. A 9in. flounder from the lake will have spawn in it.

Peter Haglund (fisherman, Lyttelton): Have been here since 1879. I use set-nets for flounders of 5in. to 5½in. I consider 5½in. the best size, both for the public and the fishermen, as I get a better price for the fish. The yellow-belly of 10in. will be caught in the 5in. mesh. Most of the flounders that come to Christchurch in the winter-time come from port. The Port flounders are far better than those from the lake, and fetch much higher prices. We get yellow-bellies as large as 18in. There is no supervision of the fisheries in port. No one ever inspects our nets or fish. I have never been visited by any one since 1888. It would be better for every one if an inspection was made. I have known of fish coming from Wellington not fit for food when landed, but there was no one to take any notice of it. I have seen yellow-bellies of 5in. with spawn. The estimate of £7 10s. per week per boat is very excessive. If I could make £1 10s. per week all the year round I should be very well satisfied. Many do not average 15s. a week all the year round. Flounders will live for a week after being caught if looked after.

EXAMINATION OF DEMETRI'S (Auctioneer at Christchurch for Fishermen's Union) BOOKS.

Period.				Cases sold.	Price received.		Period.				Cases sold.	Price received.	
					£	s. d.						£	s. d.
1892—							1892—						
Jan.	2 to Jan.	8	..	93	50	2 6	Aug.	13 to Aug.	19	..	59	41	19 6
"	9 to "	15	..	146	65	14 0	"	20 to "	26	..	47	32	10 6
"	16 to "	22	..	153	72	11 6	"	27 to Sept.	2	..	76	52	17 6
"	23 to "	29	..	139	56	5 0	Sept.	3 to "	9	..	68	45	13 3
"	30 to Feb.	5	..	154	53	5 6	"	10 to "	16	..	70	49	8 0
Feb.	6 to "	12	..	126	56	13 0	"	17 to "	23	..	92	58	16 9
"	13 to "	19	..	83	50	12 0	"	24 to "	30	..	75	55	15 6
"	20 to "	26	..	136	66	0 6	Oct.	1 to Oct.	7	..	95	63	12 6
"	27 to Mar.	4	..	124	57	3 0	"	8 to "	14	..	86	46	1 0
Mar.	5 to "	11	..	115	58	6 0	"	15 to "	21	..	114	74	16 0
"	12 to "	18	..	53	35	16 9	"	22 to "	28	..	154	81	12 3
"	19 to "	25	..	70	49	2 6	"	29 to Nov.	4	..	147	78	14 6
"	26 to April	1	..	67	47	9 6	Nov.	5 to "	11	..	102	65	14 0
April	2 to "	8	..	70	41	6 0	"	12 to "	18	..	102	65	4 0
"	9 to "	14	..	60	40	0 0	"	19 to "	25	..	134	57	0 9
"	16 to "	22	..	46	37	12 0	"	28 to Dec.	2	..	148	70	19 6
"	23 to "	29	..	47	36	19 0	Dec.	3 to "	9	..	126	65	7 6
"	30 to May	1	..	72	37	14 3	"	10 to "	16	..	115	58	0 6
May	7 to "	13	..	54	28	9 0	"	17 to "	23	..	163	68	0 9
"	14 to "	20	..	155	34	3 6	"	24 to "	30	..	63	35	3 0
"	21 to "	27	..	73	18	3 0	"	31 to Jan.	6, 1893	..	60	34	9 6
"	28 to June	3	..	62	18	17 0	1893—						
June	4 to "	10	..	36	16	5 9	Jan.	7 to "	13	..	172	53	9 0
"	11 to "	17	..	27	13	19 8	"	14 to "	20	..	137	60	2 0
"	18 to "	24	..	75	26	18 3	"	20 to "	27	..	115	49	9 6
"	25 to July	1	..	71	24	14 9	"	28 to Feb.	3	..	211	62	7 0
July	2 to "	8	..	40	18	5 0	Feb.	4 to "	10	..	148	61	3 0
"	9 to "	15	..	52	23	13 6	"	11 to "	17	..	69	34	13 6
"	16 to "	22	..	46	19	14 1	"	18 to "	24	..	92	46	15 0
"	23 to "	29	..	38	14	2 6	"	25 to Mar.	3	..	122	67	13 9
"	30 to Aug.	5	..	115	41	1 4							
Aug.	6 to "	12	..	23	16	5 6							

These are the gross sales. From this must be deducted the carriage, and commission 10 per cent. *del credere*. The carriage is now £4 per week. The carrier has to bring all fish to the market every day by 7.30 a.m. up to 50cwt.

This was the consignment of eighteen boats to Christchurch only. Probably there are supplied to the fish-hawkers an average of twenty casks per week outside of this all the year round.

RESULT FROM BOOKS, CHRISTCHURCH SUPPLY.

Total number of cases of fish from 2nd January, 1892, to 3rd March, 1893	5,785
Total gross receipts	£ 2,875 14 4
Average per case	0 9 9
Average earnings per week per man (eighteen boats, two men)	1 4 2
Subject to commission, 10 per cent., and carriage.	

Approximate Cost of Paper—Preparation, not given; printing (1,375 copies), £6 15s.

By Authority: SAMUEL COSTALL, Government Printer for the time being, Wellington.—1893.

Price 6d.]