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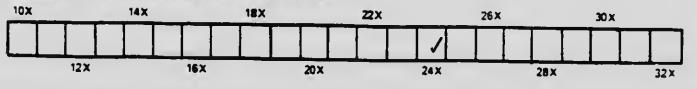
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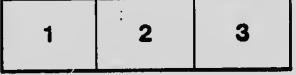
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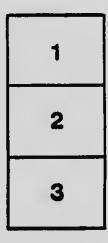
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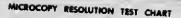
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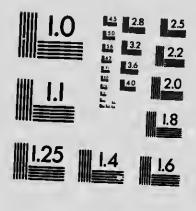


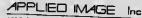
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FISH:

SOME THOUGHTS on CANADIAN FISHERIES and the CANADIAN PUBLIC.

AN ADDRESS

To the Canadian Ciub of Regina, Saskatchewan,

BY

Professor EDWARD E. PRINCE,

Dominion Commissioner of Fisheries and Representative of Canada on the International Fisheries Commission, under the Treaty of 1908.

NOVEMBER 1ST, 1910.

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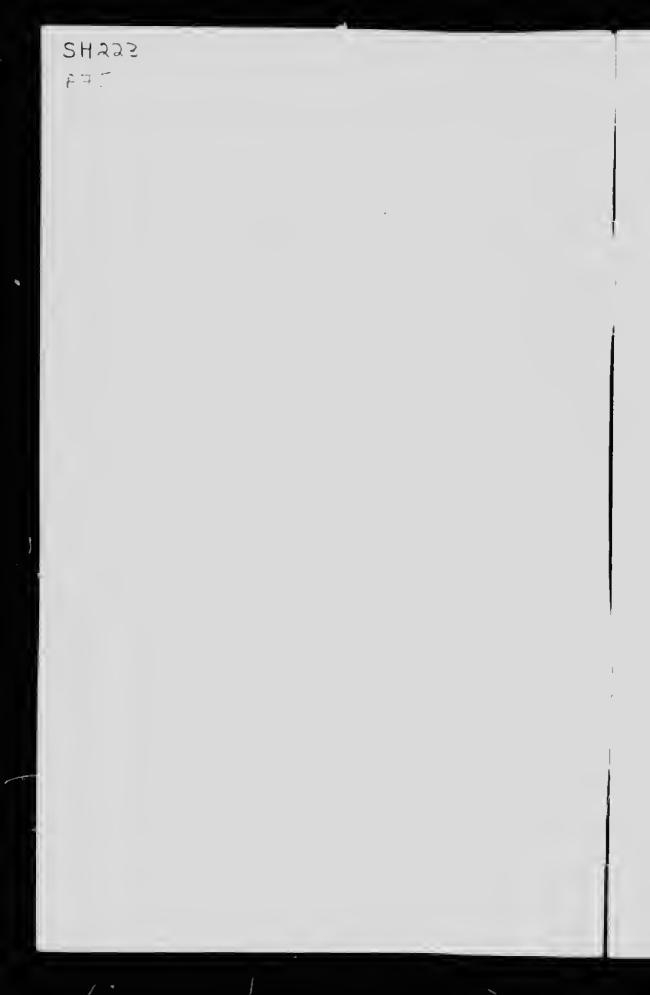
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Chairman's Speech.

Mr. William Trant, Barrister and City Magistrate, President of the Club, rose and said :--- Gentlemen, I have not before had the pleasure, which I now have, of introducing, as the speaker and guest of honour at our club luncheon, a native of the same town in which I was born, and one educated at the same school, though a year or two later, I think, than myself. Professor Prince, who is well known to all of us as the chief fishery official at Ottawa, had a brother at the same school about the same time, so that a jocular boast was current that we had "two princes" attending the school. The brother to whom I refer, is present with us as a guest today at our luncheon. Professor Prince has for a good many years devoted himself to fish and fishery work, and for nearly twenty years has been Commissioner of Fisheries for Canada. In that capacity, and as a fishery expert, he has a world-wide reputation, and I am sure that he will have something important and of great interest to say to us to-day in his address on "Fish." Prof. Prince may have some fish stories to tell us. I have now the pleasure of introducing Professor Prince, of Ottawa, Chairman of the Alberta and Saskatchewan Fishery Commission."

Professor Prince's Address.

Professor Prince was cordially greeted when he arose and began: Mr. President and gentlemen of the Canadian Club of Regina, I cannot pretend to emulate the distinguished orators, members of the British Parliament, in the interest and eloquence of the addresses with which they recently favoured this Club; but, if Mr. T. P. O'Connor aired Ireland's grievances, which I understand he did, I too hove a grievance to ventilate, and if Mr. Henry Vivian advocated open-air recreation and increased amenities for the people in our crowded cities, J shall have something to say on behalf of healthful recreation for our citizens, as I propose to preach to you to-day the gospel according to Isaac Walton. (Applause).

Introductory Remarks.

My subject is "Fish," a somewhat vague and ill-defined theme, but by no means so difficult and unpromising as the subject suggested to the late Lord Iddesleigh (better known perhaps as Sir Stafford Northcote, England's Chancellor of the Exchequer) who was invited to speak to a Devonshire audience, and was told that he might address them on "anything." He decided to speak to them on "Nothing," and gave a profound and delightful discourse on the scientific, mathematical and philosophical meaning of the term "Nothing."

A Grievance-Public Opinion Lacking.

And now I shall proceed, at once, to tell you of my grievance. It is this. We Canadians, as a people, show a singular lack of interest in the fish and fisheries of our country. We have anglers and fish enthusiasts, and a large body of fishermen, it is true, but I speak of the people generally, v en 1 say that as head of the great Federal Fisheries Service of Canad: under the Minister of Marine and Fisheries, I have constantly felt how the Department's work has been hampered, and discouragement has come from the lack of support and interest on the part of the public. One reads of exciting Parliamentary debates in Ottawa, on tariffs, navies, and endless other topics, but whole sessions often pass without mention of hsh and fisheries, or any discussion on so vast and so important a subject. Perhaps, like the late James Anthony Froude, in whose mind fish excited no interest, because these slimy, scaly, cold-blooded creatures were repulsive to him, our legislators find the finny trihe unattractive, in contrast to Froude's genial friend, John Bright, who was never so happy as when he was casting a fly on some Scottish salmon river.

No Fish Stories.

I feel bound to confess that, on this occasion, I have no fish stories to tell you, and, if I had, I have brought with me no credentials of veracity so that you might be compelled to believe them. I am unlike that aged wanderer or pilgrim, told of in mediaeval times, who asserted that he had lived for several centuries owing to the use of an ointment, an "elixir vita," which he smeared on his body. To prove his claim, he showed a tattered document or certificate from a Pope who died 300 years before, and thus established the truth of his story. I admit that the words of my eminent colleague on the International Fisheries Commission, President David Starr-Jordan, are well founded when he tells us that "as fish lie on the bottom of the sea, and trout

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lie in the streams, there can be no just complaint if the men who fish for them also lie."

Vast Extent and Value of our Fisheries.

Gentlemen, I need hardly remind you that our fish are amongst the finest, and our fisheries the most varied in the world. They extend over an enormous area. They are not the fisheries of a single country like the fisheries of Germany, or Austria or Norway, they are the fisheries of a continent, well-nigh as vast as $Eu_{100}e$. Apart from the wide-spreading waters of two oceans, the Atlantic on the east, the Pacific on the west, the inland lakes and rivers which we possess, include more than half the fresh water of the globe. All these waters abound in fish.

Compared with the other great national industries of our dominion they tank fifth. First stands agriculture, of an annual value of \$20\$,000,000: next mining, valued at about \$36,000,000 per annum; lumber recorded at \$80,000 = 0 to \$100,000,000: live stock, \$75,000,000; while the fisheries yield an annual return of from \$30,000,000 to \$35,000,000. These last figures are larger than those usually given in official reports in the Blue Books (\$25,000,000 to \$27,000) but official statistics have never given adequate credit to the fisheries of the more remote areas and the amounts used by Indi ns, Eskimos, Hudson Bay Posts, &c.

Further, while the Fisheries have an annual value less than half that of mining, they employ twice as many men; and, though lumbering yields every year three times the amount in dollars of the fisheries, yet the fisheries engage three times as many mer. It must not be forgotten that other industries are essential to the fisher dastry, such as sail making, net manufacture, boat building, the rin-ware industry, rope-making, and other trades, all of which depend more or less on the fisherman's calling.

Value of Fishing Boats, Gear, &c.

Think for a moment of the great fleet required; at least 12,000 Canadian vessels being employed in fishing, having a value of \$2,620,000; also 40,000 small boats, valued at \$1,200,000; and nets, lines, lobster traps, &c., valued at \$3,000,000. Remember also that the body of men, no less than 84,000 in number, taking part in the fisheries, would form the finest material for the Canadian Navy which has now started on its glorious career, and of which so much is at present being said. Britain, France and Germany, have realized how valuable the fishermen are, as being the best material from which to recruit their respective navies.

Fisheries of England, &c.

While I claim that the fisheries of Canada take first rank owing to the variety of fish in our waters, and the fact that they are of the hest species for food and for sport, I do not claim that the actual money value per annum exceeds that of such countries as Britain, whose fisheries yield no less than $\$_{45,000,000}$ yearly; or the United States fisheries, with a value of $\$_{40,000,000}$ yearly; but even from a financial standpoint, our fisheries are a very great industry. For example, the Pacific salmon industry embraces no less than eighty canneries, valued at over $\$_{3,000,000}$, while the lobster industry is carried on in 750 lobster canneries on the Atlantic shores, having a value of $\$_{450,000}$, and the freezing, smoking, and other fish establishments in the Dominion, are valued at not less than $\$_{180,000}$, or $\$_{200,000}$.

Of the annual yield, the Atlanuc fisheries contribute 64%; the British Columbia fisheries 26%; and the Great Lakes 8%. But the extensive waters of the two Provinces of Saskatchewan and Alberta have yet to be developed in a commercial fishery sense. These Western waters, it is true have been exploited, and, in some cases already over-fished; but the area is so vast, and there are so many lakes in a practically virgin state that the future will witness the growth of a great industry in these territories.

Fishery Statistics.

Imposing as are the figures I quote you, gentlemen,-and they are approximately true to the facts, for, as the late Professor Brown Goode declared in 1884, at the London Fisheries Congress, "the Department of Marine and Fisheries in Ottawa is one of the best administrative organizations in the world, and their methods of gathering and publishing statistics are admirable, there is nothing in the United States like it,"-yet, it must be admitted Canadian statistics are inadequate. 1 have given one reason already, namely the difficulty of ascertaining the amount of fish caught and consumed in remote areas by native tribes and by hunters and prospectors; hut I cannot forbear pointing out that takes of fish secured off Canadian shores annually go to swell the fishery returns of some of the horder States to the south of us. Such States as Maine and Massachusetts annually report catches of cod, of which a large proportion is really from the Labrador bar's and the grounds off the Gulf of St. Lawrence, while the premier fishing state on the Pacific Coast (Washington State) owes 95% of its vast catches of fish each year to Canada, to the salmon bred in the Fraser River, and to the halibut secured in incredible quantities in the Hecate Straits, and the northern part of British Columbia, which Straits are almost entirely enclosed by Canadian territory, namely, by Queen Charlotte Islands, Vancouver Island and the mainland of the Province. These Straits, it has been asserted, are really high seas, but no one looking at a map of the North American continent, could for one moment consider such a claim as reasonable.

Unsurpassed Game Fish of Canada.

Gentlemen, I am addressing, I am aware, a number of sportsmen and anglers who are interested in game fish. Apart from our vast commercial fisherics, we have in Canada the greatest game fishing waters in the world. Scotland has her Tay, Ireland her Shannon, England her Severn, and all these lovely and noble salmon rivers I know well, but none of them can compare for size or productiveness with the peerless Restigonche, the beautiful St. John River, and fifty other salmon rivers in Eastern Canada. (Applause). The Dominion too, is *par excellence*, the country of the black bass, that most pugnacious and sturdiest of game fish. Our black hass are found all the way from New Brunswick, through Quebec west to the extreme limits of Ontario, a linear stretch of over a thousand miles, and amongst game fishes what rival can be named to this splendid fish, unless it be the royal salmon himself. (Applause).

Capture of Black Bass Described.

Who that has felt the tug of a small-mouth black bass at the end of his line would not swear that he had hooked a seven-pounder, although the fish might only be a one-pounder. You know well his arts and manœuvres, many of you gentlemen. He takes your fly so bravely, nay, so ferociously, that you must hold your rod firmly and play him skilfully. You strike, and he is securely hooked. Away he bounds, he sounds deep and seeks the jagged ridges of rock below to cut himself free from the hampering gut. He rushes zig-zag fashion and suddenly twists spirally, he leaps high, he shakes his head, but all his tricks fail to free him from the hook. Away he goes again more fiercely than before. It is a noble tug-of-war, but play him not too loosely or he will unbook himself; hold him not too tensely or he will rend your slender horse-hair cast. You reel him in as he slackens a little, and now he leaps again, and yet again, and yet again. When will he stop? Is he tired? No, he makes feints, but he never sulks, for every time he seems to flag he follows up by a rush that makes your reel sing shrilly; he leaps higher out of the water than before, and your slender tip bends like an inverted "U."

At last you land him, quivering, panting, yet full of life and of tireless activity. You, bis captor, alone are tired; but you are glad. Your victim was worthy of your mettle; your victory is one to be proud of. Such is our Canadian black bass. (Loud Applause).

Proposed Stocking of Western Waters.

Can this game fish be planted in our wostern waters, 1 am often asked. My own feeling is that you have, especially in the streams and rivers of the eastern foothills of the Rockies, some fine game fisb. Your mountain trout or cut-throat is a splead d game fish, and your grayling, which has quite a wide distribution north to the waters of the Athabasca, these merit attention first. Both are superb game fish, and the introduction of a new, non-native fish might be a danger to the fine species you already possess. Australia introduced the rabbit, North America introduced the European house sparrow, and both have become a serious pest. Your western provinces have the pickerel, or pike-perch, (called doré in the east), also fine jack-fish and some yellow perch, and many United States anglers regard these as species worthy of the angler's attention.

Western Commercial Fisheries will develop.

From a commercial standpoint you have most promising regions awaiting development, and vast northern waters not yet utilized. In Alberta and Saskatchewan at least 40,000 square miles of lakes and rivers are open to lishery enterprise, as compared with 75,600 exploited on the Great Lakes, and 15,000 square miles of Manitoba waters. Many of your lakes are stocked with the finest White-Fish to be found on this continent, and, as I have said, with Pickerel or Doré, and other good table fish. The re-stocking of western waters with native fish, and the planting of new kinds, is a subject upon which the Fisheries Commission in the West, of which Commission I have the honour to be Chairman, is at present drawing up a report and I need not go into further details on this occasion. Indeed, the eagle eye of my distinguished colleague on the Commission, Dr. Sisley of Calgary, is upon me, I observe, and I dare venture to say no more. (Laughter).

Small Value of Western Fisheries at present.

That the fisheries of this Province will witness a great development, I cannot douht. The whole value of the fisheries of Saskatchewan and Alberta was given at \$50,000 in 1883, but they are now valued at \$200,000, of which amount Mr. E. W. Miller, the able and zealous Dominion Inspector of Fisheries for the Province, present with us to-day, credits Saskatchewan with \$152,795 last year. Who shall say what will be the annual return ten years hence, or fifty years hence, with the building of railways in the northern areas of the Province?

Save the 'Fish from the Buffalo's Fate.

I will not weary you with a further enumeration of dry statistics, as this is not a suitable occasion for exhaustive remarks. What are the points which, in closing, I desire to impress upon you? I would mention the waste that has taken place. As with so many valuable Canadian resources, such as the reckless destruction of forests, &c., the tisheries have suffered from prodigal waste. They have suffered not only from wilful waste, over-fishing, poaching at spawning times, and other abuses, but also from neglect, so that one feels inclined to agree with "Punch," the London comic paper. "Punch" is humorous, but his humour often has a serious side, and so it was when he referred to St. Anthony's famous sermon to the fishes:

A saint once held forth, Sir, the fishes to teach,

What a sermon to us, Sir, the fishes might preach!

Too late, as a rule, the public realizes that harm has been done, and you remember how the countless herds of huffalo were butchered on the prairies, with no one raising a voice to save them, and with public opinion indifferent as to the fate of that fine animal, or, rather, there was no public opinion expressed until it was too late.

Dominion versus Provincial Administration.

Ottawa and its staff of Fishery Officials appear, in my opinion, to receive little sympathy or support from the public, indeed the sympathy and support, as a rule, seem to he in favour of the men who violate the Fishery laws and not in favour of the officers, some more zealous, and others less so, whose duty it is to enforce the regulations. Whatever may be said of the Ottawa methods in the past, no one can deny that vast good has been accomplished, and, though we hear frequently complaints that everything is not done to protect the fish that might be done, yet, had the Fisheries service not existed, they would have been, no doubt, in the exhausted state which many of the fisheries in the Republic to the South have reached. Some people say: Let each Province manage its own fisheries. Would that improve matters? Indeed, the complaints in Quebec and Ontario with I doubt it. Provincial administration are now more frequent than formerly, and far more urgent, that fishery regulations are not enforced, and fishery patrols are wholly ineffective and inadequate. The border states across the International line afford usample warning of the futility and failure of separate State regulations. Friction, confusion, overlapping, depletion and waste are going on in the waters to the south of us. There is no uniformity of either the laws or their enforcement in the States along the boundary waters. The best authorities are agreed that Federal control in the United States can alone prevent the complete destruction of the fisheries. "You in Canada with your Federal fisheries administration, have a tremendous advantage over us in the United States," I have been assured repeatedly by prominent fishery authorities to the south of us. I cannot speak of this at length, and I feel precluded from doing so, because the Dominion Government has chosen me to represent Canada on the International Fisheries Commission, and I am co-working with Dr. David Starr-Jordan, the United States Commissioner, at this very time in the unification of fishery laws in the boundary waters. I have great hopes that the progress we have made will result in permanent benefit to the fishery resources of both countries.

Excellent Work of Dominion Officers.

The real benefit resulting from the Federal administration of the fisheries cannot be questioned by anyone qualified to form a judgement on this matter. Many of our valuable fisheries would have been a thing of the past but for the work of the Department at Ottawa and its staff of officers, over 2,000 in number. From my experience as an official, and as a scientific expert in Scotland, England, and Ireland, 1 can testify to the great work done by the Fisheries Service of this country without much show or ostentation but quietly and effectively all the same: and you will be interested to learn that the Dominion Government is about to reinstate a large staff of officers in the Eastern Provinces, a staff which was abolished some years ago when the Fisheries judgment in London determined that the fisheries were the property of the Provinces.

Great Work of the Fisheries Department at Ottawa.

The enforcement of the licence system, the prevention of overfishing, the limitation of nets and gear, the observance of close seasons during spawning time, the prevention of pollutions, and the abolition of injurious dams and obstructions, the provision for gates on irrigation canals, &c., the operation of hatcheries, and the extensive stocking of waters year by year, with young fish, indeed, the carrying out of an extensive and wide system of administration and the enforcement of an elaborate code of fishery laws, is a task which the Fisheries Department of Ottawa has attempted, and the way in which it has accomplished at any rate a great part of its work entitles it to public sympathy. support, and approval. The Cabinet Minister at the head of the Department, has always had a difficult and heavy task, and is entitled to all the support and credit that thoughtful and intelligent men can give to a conscientious performance of duty. Fishery Officers have a difficult, and even risky task to perform, and they are doing excellent work. The Department is not neglecting its duty, though Parliament has been less generous in voting funds for fisheries work than for many other public services. It will do its work better if all over the country more interest is shown by the people and more support given in the shape of public opinion, that public opinion which, twenty-five years ago, might have saved the noble herds of huffalo on your western prairies.

International Fisheries Agreement.

International fishery difficulties need not worry us, gentlemen. The gravest problems affecting our Atlantic fisheries were settled at The Hague recently, while, under the Fisheries Treaty signed by King Eoward and President Roosevelt on April 11th, 1908, an International Commission was authorised, on which, as I have said, I have the the honour to be the Canadian representative; and my brilliant colleague and myself have, as thoroughly as we possibly could, surveyed the sea, river and lake fisheries along the boundary line with such completeness that we were able to submit to our respective Governments a code of 66 regulations, the adoption of which must be of infinite benefit on both sides of the boundary waters. We in Canada are equipped for enforcing these regulations: the United States has to organize a staff for the purpose; but a nation which has done such magnificent work in various departments of national enterprise will surely not fail to do as magnificently in this.

Great Hopes for the Future.

Gentlemen, we may well he optimistic in spite of head-shakings and gloomy forebodings by croaking fishery enthusiasts or disappointed sportsmen. These sportsmen 1 fear may not even possess the skill to land a salmon or a bass, and are well justified, therefore, in complaining of their non-success; but, as the proverb says, there are as good fish in the water as were ever taken ont. 1 say we may and must be hopeful with such facts as I have stated before us. Pardon me, therefore, if I sacrilegously amend some well known lines of Robert Browning, and ruthlessly transform them, closing by reminding you that

> God's in His Heaven, The fishes are in the water, All's right with the world.

> > (Prolonged Applause).

Vote of Thanks.

The proceedings concluded with short speeches, by several prominent sportsmen, and with a vote of thanks which President Trant conveyed to Professor Prince in a brief, enlogistic speech.

