1911.

NEW ZEALAND.

ENGINEERING AND KINDRED INDUSTRIES

(REPORT OF MR. M. P. CAMERON ON THE CONDITION OF THE).

Laid on the Table by Leave of the House.

REPORT.

SIR,— H.M. Customs, Wellington, 31st July, 1911.

According to your memo. of the 9th December last, on record C. 1910/1921, in which the Minister requested me to make inquiries in regard to the condition of the iron, engineering, and kindred industries, I have the honour to report and advise as follows:—

I visited the following centres: Bluff, Invercargill, Gore, Dunedin, Christchurch, Greymouth, Westport, Nelson, Wellington, Wanganui, Napier, Auckland, Thames, Hawera, New Plymouth, and Palmerston North.

Instead of meeting the engineers in societies or bodies to discuss matters, I adopted the more thorough method of interviewing each firm separately, and by so doing I have secured confidential information and statistics regarding the engineering and iron trade generally which I could not otherwise have procured. Furthermore, the evidence is of great value inasmuch as it is authenticated by the signature of the person or persons giving such evidence. Much of it, however, discloses the private affairs of the different firms, and naturally they have made the request that such information, or at least their names, shall be considered as private and confidential, and not to be made public. With this promise having been given, I have the honour to hand you herewith true copies of all evidence taken by me.

The evidence, you will observe, goes to show that the older-established engineering-works are suffering a decided depression in trade, brought about in several ways. For instance, eight or ten years ago the southern foundries especially were exceedingly busy with orders for dredging machinery. They also exported considerable quantities to Australia. In three years dredging plant was exported to Australia to the value of £25,234. This, however, lasted only a few years, as New South Wales had in the meantime become part of the Commonwealth, and, having built up foundries under a protectionist tariff of 25 per cent., these exports soon ceased, and in the three years 1908–10 they fell to £5,969. At the present moment the trade is reversed: the Commonwealth is now exporting into New Zealand dredging plant, buckets, manganese pins, and some other dredging material which carries only a 5-per-cent. duty in New Zealand. With some reason, therefore, and in self-protection, the engineers ask that this duty should be increased to 30 per cent. and 15 per cent. The dredging boom in New Zealand, from 1900 to 1906, created such a demand for machinery that many large engineering firms installed heavy and expensive plants, which are now lying completely idle, and firms who then employed as many as two hundred and fifty hands have now only fifty. This state of affairs is brought about by the ending of the boom and the stoppage of exports to Australia, while no new business has arisen to take their place.

As an instance of how a moderate protection will assist Dominion manufacturers while it does not increase abnormally the cost to the consumer, tenders for twelve cyanide-tanks were called for on the West Coast, and the order was about to be cabled for when it was discovered that the duty on this particular article was 20 per cent. instead of 5 per cent. (as the company understood), and so the order, amounting to some £1,300, was given to the local engineering firm, which just enabled them to keep their hands in employment, as business was becoming very quiet.

The making of steam-engines and boilers is an industry which is fast passing out, a fact contributing in no small degree to the depression. These are being superseded by suction-gas plants, oil and gas engines, and electricity; but, so far as the stationary oil and gas engines were concerned, most of those imported are of British make, and therefore free by tariff, consequently the New Zealand engineers have not been able to manufacture to compete; but they have manufactured a large number of first-class oil-engines of the marine type, being enabled to do this because the imported engines are mostly American and carry a 20-per-cent. preferential

duty. This enables them just to hold their own; but they complain very much about the inferior quality of the American engines, especially the cheaper class, which they are asked to compete against. To show that they have every confidence in their own manufactures, they ask, and declare it to be as important to them as an increased tariff, that an oil-engine expert should be appointed by the Government to thoroughly examine *all* oil-engines before being installed into any boat, either fishing or pleasure. If this is complied with, they are satisfied that very few of the cheaper quality they are asked to compete against will be accepted.

This is an industry I strongly advise the Government to encourage to the fullest extent, not only because it is a coming motive power, but because it is already fairly well established against adverse circumstances, which leaves little, if any, profit to the manufacturer, while it employs a very large number of hands. The following statistics will show its growing importance: For the five years 1906–10, £426,632 worth of gas and oil engines were imported; equal to £85,326 annually. This shows an increase of nearly 65 per cent. on the previous five years (1901–5), which amounted to £260,196; and these figures may be augmented by oil-engines for motor-cars, the imports being, for the five years 1906–10, £35,272, making a grand total of all oil-engines and gas-engines for the last five years of £461,904, equal to £92,381 annually. It may be as well to state that of this amount £329,232 worth were British (including gas-engines), consequently free from duty, and £132,672 worth were foreign and subject to 20 per cent. preferential duty.

Having personally examined the engines now being manufactured by the Dominion engineers, I confidently express the opinion that if a fair measure of protection was given—say, to the extent of 30 per cent. on British and 15 per cent. preferential on foreign—very soon the £92,381 annually sent out of the Dominion would (less the materials) be all expended amongst New Zealand workmen, and without extra cost to the consumer, as local competition and specialization would both assist to keep the prices low. Further, to prove the manufacturers earnest in this regard, I have been supplied with their price-lists, and their evidence states that they are prepared to sign any document necessary that these prices will not be increased if further protection is granted sufficient to block the imported article. They rely upon the extra output and specialization to enable them to do this. This is an industry which would take the place of the steam engine and boiler, which, as I have already stated, are fast passing out as a motive power, as the following figures go to show: Imports of steam-engines prove a falling-off for the five years 1901–5 as compared with 1906–10 of £22,629:—

	1901–5.	1906–10.
	£	£
British	72,437	50,088
Foreign	5,086	4,806
	£77,523	£54,894

while the evidence of the Dominion engineers for the same period goes to show that the manufacturing of them locally has almost ceased.

Another contributing cause, and one complained of bitterly, is the fact that so many Harbour Boards, City Councils, Road Boards, and public bodies generally send abroad for all their requirements, even though New Zealand prices are about equal to the imported. Two particular examples cited exemplify this: Tenders for a certain iron bridge, costing about £22,000, were called for, but the contract was given to an importing agent, though the local tender was only £200 higher. The result was that the bridge has cost nearly £1,000 over the contract price, and litigation may yet follow; whereas had a local tender been accepted no such trouble would have arisen, as they tendered to erect and hand over the bridge complete for a stated amount. The other case is where a public company ordered from Home sixteen tube mills at £197 each, equalling £3,152, while the local tenderer was only £3 each higher. Had there been a 20-per-cent. duty instead of being free under the present tariff, the order, they argue, would never have gone out of New Zealand, and the cost would have been actually lower to the company than they could land them for.

I would suggest, where the Government provides advances to local bodies or companies for bridges or similar work, that, all things being equal, a clause giving preference to Dominion manufactures should be insisted upon. In such work as bridge and structural ironwork engineers ask for a higher tariff than 20 per cent. They contend that most of the cost goes in labour, as all the sections of wrought iron are imported, and no casting or work of that nature is now required, while the workmen get 1s. 4½d. per hour, as against 7¾d. in England and less on the Continent. On such work, therefore, they ask a 30-per-cent. duty, and a 15-per-cent. preferential duty on foreign. The introduction of wrought-iron work and ferro-concrete buildings has also considerably affected the ironmoulding shops, for whereas previously heavy cast-iron columns and bases were regularly used, now wrought-iron and concrete work takes its place.

The blacksmithing trade and boilermakers are all complaining of the want of trade. Many of the foundries have only one or two blacksmiths' fires going, out of from four to seven. Their steam and electric hammers are only occasionally used, instead of constantly, as was the case a few years ago. A short time back a great deal of work was done for the Home steamers, especially in Wellington; now this has practically ceased, and only what is actually essential for the carrying of the steamers Home is done out here. In Wellington, and elsewhere too, public companies—such as the Gear Company, Wellington Meat Export Company, Gas Company, Harbour Board, and Union Steamship Company; and also, farther north, the United Engineering Company, owned by the Union Steamship Company and the Northern Shipping Company, the Waihi Company, the Waihi Grand Junction Gold-mining Company, the Talisman Gold-mining Company, and many others—all have their own workshops now, and all the work now done by

them used to be given out to the local engineering firms. All this, naturally, prejudicially affects the work coming to the local firms, but it does not necessarily mean that less work is being done or fewer hands all round employed.

The boilermaking, in sympathy with the falling-off in steam-engine building, is languishing. This is proved by the imports. There were in 1901–5 (five years) 366 boilers imported, while only 201 were imported during the following five years (1906–10), thus showing a falling-off of 42½ per cent. In order to secure to New Zealand manufacturers as much of this trade as possible, they ask that a duty of 30 per cent. and 15 per cent. preferential should be imposed.

Agricultural implements and machinery manufacturers, I consider, have the "hardest row of all to hoe," inasmuch as they have an entirely free tariff against them, while their neighbours the Commonwealth manufacturers have a protection varying from 15 to 25 per cent., which has enabled them to export to New Zealand during the five years 1906–10 £54,405 worth of agricultural implements; while, during the same period, New Zealand exported to the Commonwealth only £17,963 worth, and this was made up principally of patented implements. From what I have seen I am firmly of the opinion that this is an industry which should receive the very greatest consideration and support possible from the Government and the country. It is capable of enormous expansion as the country is opened up and settled, as the figures following will prove; and no one can say that the implements New Zealand manufacturers now turn out are inferior to anything imported. In corroboration of this I may quote (from the newspaper cutting herewith) the following remarks made by Mr. Richard Evans and Mr. G. Skeat, two of the Scottish farmer delegates who visited New Zealand lately:—

"Christchurch, 27th April, 1911.

"Dealing with the question of agricultural implements, Mr. Richard Evans, at the Farmers' Union meeting, paid a high tribute to the New Zealand manufactures. He said that the New Zealand implements were actually cheaper than the imported goods. They lasted longer, and were more suited to the work they had to do. Mr. G. Skeat spoke in a similar strain, and declared that New-Zealand-made implements were second to none."

There is no doubt but that the New Zealand manufacturer makes a study of local conditions, soil, and requirements, and manufactures accordingly suitable implements for the farmer. This is exemplified from the fact that several such implements have been sent abroad as "copies" for manufacturing purposes. In support of the statement I instance Messrs. Booth and MacDonald's disc harrow, which is now being imported by the agents of Messrs. J. and T. Howard, of Bedford, and the Massey-Harris Company; and with a free tariff in their favour they are underselling the original inventor, and this can easily be done considering the difference in wages paid and the fact that they are duty-free.

The imports of agricultural machinery and implements are very considerable, amounting in ten years to £1,155,573, made up as follows:—

	British. £	Foreign. £
1901–5 (five years)	215,445	255,271
1906–10 ,, ...	318,460	271,367
	533,905	526,638
Ploughs and harrows:—		
1901–5 (five years)	29,797	19,414
1906–10 ,, ...	34,295	11,524
	64,092	30,938
totalling altogether	£597,997	£557,576

or a grand total of £1,155,573; or, taking the last five years only, to an annual importation of £127,129; which the manufacturers assure me—and I have no hesitation in supporting the statement—could and should be made in New Zealand if a duty of 30 per cent and 15 per cent. preferential on foreign was imposed.

The only article which in the meantime I would advise—and the manufacturers agree with me—should come in free is the reaper-and-binder, which has not so far been manufactured in the Dominion. Their argument that local competition will always keep the price low for the consumer is correct, and as a guarantee that their prices shall not be too high the manufacturers have supplied me with published price-lists which they will undertake, by documents, shall not be increased so long as wages and materials remain as at present.

The International Harvester Company and the Massey-Harris Company have introduced the very costly principle of sending out agents to scour the country for orders, which has compelled the local manufacturers, in self-defence, to do likewise. This has increased the cost to the farmer of from 15 to 20 per cent., which is paid in commission to agents. This amount, prior to the advent of the two companies named, was saved to the farmer, as he used to send his order direct to the New Zealand manufacturer.

As I have already said, the agricultural-implement industry is one of great importance to this country, and one that will grow enormously if encouragement were forthcoming in the way I have indicated.

Dairying machinery and implements: As there is no possibility in the near future of cream-separators being manufactured in New Zealand, I advise that they should be allowed to come in free as at present. Milking-machines, however, are largely manufactured in New Zealand, and

many patents have been taken out for them by New-Zealanders. Complaints, however, have been made to me that these patents have been sent abroad and slightly altered, and are now being imported into the country against the original inventor duty-free (British) and 10 per cent. (foreign), and at a price sufficiently low to undersell the local article on account of difference in wages and labour conditions. To protect themselves against this condition of things they ask for 30 per cent., and 15 per cent. preferential.

Dairying steam-engines: The imports of these fell from £7,444 in 1901–5 (five years) to £2,378 in 1906–10 (five years), while dairying boilers fell from an average over five years of £2,511 annually to £256 in 1910. This is another indication that the steam engine and boiler are fast passing out, and New Zealand manufacturers are suffering accordingly.

There is one important industry I would specially mention as having most successfully established itself under the 20-per-cent. tariff, and that is the cooking-range-making industry, which employs a large number of hands. By specializing in this particular article and making a study of local requirements, the New Zealand makers have completely stopped the importation of cooking-ranges (with the exception of American stoves). As an example, imported ranges that twenty to twenty-five years ago were sold at £6 10s. are to-day sold of New Zealand make at £4 10s. Local competition has reduced the price, and the manufacturers in this industry are so satisfied that they have completely excluded the imported article that they do not ask for further increase in duty.

Malleable steel and crucible castings is an industry that is gaining ground in New Zealand. In one of the Dunedin foundries it is at present almost its sole support, the ordinary engineering trade having so fallen off that practically £11,000 worth of machinery in this particular foundry is at present lying idle. I consider that the industry above mentioned should have further protection, for the reason that it has practically no advantage in the matter of freight charges, as the weight of the raw material and the manufactured article is about equal. British malleable castings are landed at £1 17s. 4d. per hundredweight, American £1 12s. 8d., while the New Zealand price is £2 3s. If, the manufacturers contend, 30 per cent. and 15 per cent. preferential on foreign was imposed, it would enable them to increase their output to such an extent that they would soon succeed in so reducing the price that it would keep the imported article out.

Steamship-building: Some years ago quite a number of small steamers, not capable of steaming out from the Old Country, were built at different ports in New Zealand, but the improvement in bar harbours has enabled steamers of greater draught and larger tonnage to negotiate them, and, as these larger steamers can with safety steam out from Home, the necessity for the smaller craft has nearly disappeared. Lately, however, especially in Dunedin, the industry in iron-ship building has been revived to a considerable extent, and for larger tonnage steamers than hitherto. One firm alone, having just finished two steel ferry steamers, are now engaged on two more, one of which is a twin-screw steamer for the New Zealand Government. The engines for these steamers are designed and built on the premises by the company, and the hulls are designed by a practical naval architect lately from Home, who, if sufficient work offers, intends remaining in New Zealand. The total of these tenders, including a tug they had tendered for, amounted to £61,000, and the wages represent about £35,000 of the total, so that it is an industry employing a large amount of labour, and one which should in every way be encouraged, at least on steamers up to 500 tons (to the extent of 30 per cent. and 15 per cent. preferential). The preferential, they say, should even be higher, because quite a number of ships' hulls are built in Holland, engined in Britain, and sent out as British-built steamers. At present all steamers are free from duty, including their furnishings.

The shipbuilding industry is one of great importance to New Zealand; our neighbour the Commonwealth has recognized her responsibility in equipping a shipbuilding yard and dock, even to the building of her own navy; and no doubt this enterprise has been approached from a twofold standpoint—(1) to develop her local industry and to assist in maintaining her young population; (2) to be prepared for eventualities which may in the near future arise on account of possible partnership arrangements with the Mother-country in naval responsibilities. My own opinion is that the shipbuilding industry is a large link in the industrial chain of a self-contained and isolated country such as our Dominion is, and to encourage this industry in its infancy, as is suggested, by means of the tariff, is, I consider, a reasonable proposition.

I was much impressed with the progress that has of late years taken place in the manufacturing of locomotives, and I feel it is my duty to state that no better or more reliable workmanship could possibly be put into the locomotives I saw in the course of manufacture, and also in their completed state, and the Government and the country are to be congratulated on recognizing this industry and in supporting it to the extent they have done. There is no reason why every engine required for our railways should not be manufactured within the Dominion. This industry forms another very important item in building up a self-reliant country. The Government is practically the only user of locomotives in New Zealand, and they have evidently recognized the quality of these New-Zealand-made engines, and if they continue to place their orders with New Zealand manufacturers as they are now doing (besides those they manufacture in their own workshops), I do not consider there is any necessity for a further duty being imposed upon them.

Several engineering firms have informed me that, if a reasonable duty was put upon motor-cars as a whole, they would start the manufacturing of them in New Zealand. At present the position is that the chassis, which includes the undercarriage, with engine, &c., complete, is free from duty, while the body only is dutiable at 20 per cent. This was done to assist, if possible, carriage-builders of the Dominion, but it was not taken advantage of, and I have evidence that not a single body has been built in New Zealand for an imported chassis. It would therefore

be better to declare the cars in a complete state either free or dutiable; but, as I have said, if the latter principle is given effect to, the manufacturing of them would soon be established within the Dominion.

The brass-founding industry is one which is in close relation to the engineering industry, and, in sympathy with the latter, is not in a progressive state. One firm who used to manufacture large quantities of brass bib-cocks, and who erected an expensive plant for the purpose, have had to cease their manufacture and pay off their hands, on account of the increase in wages and other labour conditions. In 1901 they employed 251 hands in manufacturing, now they have only 162. Another firm has recently installed a plant, costing £3,000, for the manufacture of brass taps, &c.; but they fear they will have to close down, on account of the large amount of imports and the keen competition from abroad, together with the increase of wages and working-conditions in New Zealand. Their wages-sheet runs into £120 per week, and they are prepared to double their plant and buildings if a protection is afforded them of 30 per cent. and 15 per cent. preferential.

There are a few other metal industries which require attention, such as the galvanized-corrugated and plain-galvanized sheet-iron industry. There is at present only one maker of galvanized corrugated iron in the Dominion, and he has the only "pot" in use, but states that the demand does not warrant the putting-down of another. He, however, does not ask for further protection by way of the tariff, but makes the statement that if the Government would continue to specify in their tenders that only Dominion-made galvanized iron should be used, and their officers insisted upon its being used, he is quite satisfied that if this was done he would be enabled to increase his plant and hands considerably. The imports of galvanized plain and corrugated iron during the past fifteen years show a marked increase, though not so great during the last five years as during the previous five years. The imports were as follows:—

	Galvanized Corrugated Iron. Cwt.	Galvanized Plain Iron. Cwt.
1896–1900 (five years)	1,013,510	178,975
1901–5 (five years)	1,397,205	271,593
1906–10 (five years)	1,491,966	351,676

Barbed-wire and staple and standard manufacturing at present is an industry free from duty, and one that would be taken up if a protective tariff was provided. In fact, it was started many years ago under a protective tariff, but for some reason the duty was removed and the factory closed down. The imports of barbed wire for 1906 to 1910 (five years) was 19,224 tons, and of staples and standards 4,559 tons, most of this being staples. In the Commonwealth there is a protective tariff on staples of 5s. and 5s. 6d. per hundredweight. I consider, however, that 3s. and 1s. 6d. preferential would be sufficient in New Zealand, and for barbed wire 30 per cent. and 15 per cent. preferential. In the Commonwealth there are now seven firms engaged in the manufacture of these articles, and no doubt a corresponding number would soon be at work in New Zealand. One firm which is prepared to start manufacturing barbed wire and staples stated that it would guarantee no increase in present prices if security were given that the American combine will be prevented from cutting prices by dumping, and so stifling the industry. This was the experience already in New Zealand in the matter of wire-nail manufacturing, a factory having been established at Woolston, Christchurch; but immediately the nails were put on the market the American article was reduced to such a figure that the factory was shut down and never reopened. This is an industry which I consider, if given sufficient protection—say, 3s. and 1s. 6d. preferential per hundredweight—would soon be re-established.

The imports of wire nails are very considerable, and increasing annually. In 1900 they were £47,799, and in 1910 £67,246, showing an increase of nearly 42½ per cent. Of the latter amount £28,498 was British, £14,608 Canadian, and £24,140 foreign.

Another very important industry has within the past few years been successfully started in New Zealand, that of iron-bedstead manufacturing. Dunedin and Auckland are the pioneers in this particular industry, and the articles I inspected are a credit to the Dominion. It is an industry that employs a large number of hands, and has become such a menace to the imported article that the following appears in W. A. Sparrow and Co.'s London and Liverpool freight-list of the 4th April, 1910: "Negotiations are afoot to obtain a reduction of the freight upon bedsteads, as few indents are reaching this country (England) since their manufacture was commenced in the Dominion. Already the Australian rate is 12s. 6d. a ton lower than upon ordinary rough measurement, and it is hoped to obtain a corresponding concession for New Zealand."

If things remain as at present the bedstead-manufacturers do not ask for further protection, as they consider that they can just hold their own; but if freights are reduced as suggested above they will not be able to compete. Such a reduction in freight would necessitate their asking for an increase of duty, which at present is 20 per cent. and 10 per cent., to 25 per cent. and 12½ per cent.; and this I recommend as being fair and reasonable in order to support an industry which has held its own successfully without the necessity for further protection were it not for such tactics as Messrs. Sparrow's list reveals.

I feel that I cannot conclude without strongly urging upon the Government the national importance of assisting in every way possible the development of the iron- and steel-ore deposits known to exist within the Dominion, and bring them to some practical account. Upon no consideration whatever should the Government allow the exportation of these ore-deposits, but rather offer every inducement for the free working and development of them within the Dominion, and with outside capital if necessary. The manufacturing of iron partakes of a national character of the very first importance. It forms the foundation of independence and of self-reliance,

especially in time of war, to an isolated country. The Government should therefore view this matter from a broad standpoint, and offer bonuses of sufficient magnitude to induce capitalists from abroad to establish works within the Dominion, not only for smelting, but also for the manufacturing of iron and steel of various kinds. To this end and purpose I beg to suggest that the following bonuses be offered:—

For the first 30,000 tons pig iron or ingot steel, 15s. per ton = £22,500;
For the first 20,000 tons bar, rod, angle, or other manufactured iron or steel, £1 5s. per ton = £25,000;
For the first 10,000 tons sheet or plate iron or steel, £1 5s. per ton = £12,500;

making a total of £60,000. This would ensure the manufacturing of all kinds of iron and steel within the Dominion, the imports of which for the five years 1906–10 were—Pig iron, 51,504 tons; bar, rod, &c., 109,532 tons; sheets and plates, 42,074 tons.

I believe that bonuses such as these would have the desired effect of inducing outside capital to take this important industry up and turn to marketable account the immense quantities of ore now lying dormant, awaiting only capital, enterprise, and experience to develop it into one of the staple industries of the Dominion of a national character, the Government themselves being the largest users of these articles upon which I have asked that bonuses should be paid.

There were no figures kept by the Department of Labour prior to 1903 of the number of engineering workshops, but in 1903 it gave 151, and in 1911 328, thus showing an increase of over 112 per cent. in nine years. This increase, however, in the number of workshops as shown by the Labour Department must not be taken literally, because what is now considered by the Department a workshop is a place where two or more employees are engaged, and the increase consequently does not necessarily mean a proportionate increase in the aggregate of the number of hands employed; as a matter of fact I find from statistics that there has been no increase in the number of hands employed in the engineering industry during the past five years, as the returns hereunder, for seven years, go to show. These figures speak for themselves, and are not by any means encouraging considering the growth of the country as testified by the increase in population and by the general exports and imports. Engineers employed—1905, 3,632; 1906, 3,942; 1907, 4,116; 1908, 4,206; 1909, 4,392; 1910, 3,985; 1911, 4,105.

Judging from these figures, it would appear that the engineering industry is at a complete standstill, with an inclination to go backward rather than forward. This must be regretted by the Government and the country alike, for, as a rule, when the iron industry of a country is busy all else is in a prosperous condition. The iron-manufacturing industry therefore is one which should be placed in the position of keeping pace with the growth of a young and progressive country; but I fear it has been retarded by the enormous imports of machinery and implements, amounting in eleven years—1900–10—to £8,073,621, or equal to £770,329 annually, as shown by the returns herewith attached, each year invariably showing an increase on its predecessor, while the Dominion manufacturers are practically idle. This clearly goes to show that something is wrong and requires immediate remedy, especially when it is considered that most of the imported articles enumerated could be manufactured satisfactorily within the Dominion, which, if done, would necessitate the employment of about 20,000 engineers and general metal-workers' hands, instead of 11,540 as at present. When wives and families are added to this increased number, surely an extra duty should not be objected to in order to foster such a desirable state of affairs, especially as manufacturers, in many instances, have undertaken to guarantee no extra cost to the consumer. To the dairy and agricultural farmer alike such an increase in the population would mean an enormous advantage, as it would establish a cash market at their own doors, instead of having, as at present, to go abroad for it on terms.

Imports of General Machinery, and Agricultural Implements and Machinery, for Eleven Years, 1900 to 1910, inclusive.

	British. £	Foreign. £
Agricultural machinery	559,108	561,908
Ploughs and harrows	71,455	37,083
Dairying machines	231,435	206,739
,, engines for	10,557	510
,, boilers for	13,090	2,745
Dredging machinery	198,431	17,964
Electric machinery (10 per cent.)	1,038,080	295,769
Electric machinery (20 per cent.), (three years only—1908–10—no record kept prior)	135,124	82,059
Electric machinery (free), (three years only—no record kept prior)	203,914	33,206
Steam-engines	132,796	10,174
Gas and oil engines	459,665	265,762
Gas and oil engines for motors (five years, 1906–10)	25,172	10,100
Boilers for steam-engines	86,117	3,502
Flax-milling machinery	32,169	3,381
Gas-making machinery and plant	230,363	18,429
Locomotives	52,640	142,304
Mining machinery	336,722	74,678
,, engines for	79,579	3,917
,, boilers for	29,052	...

Imports of General Machinery, &c.—continued.

	British.	Foreign.
	£	£
Paper-milling machinery (5 per cent.)	13,704	443
,, (free)	2,938	...
Portable and traction engines	357,710	3,402
Printing machinery	288,598	78,424
Refrigerating machinery	74,472	24,259
Woodworking machinery (free)	72,389	48,692
,, (5 per cent.)	4,704	6,704
Woollen-milling machinery (5 per cent.)	109,312	502
,, (free)	12,804	...
Machinery unenumerated (20 per cent.)	653,038	213,856
,, (10 per cent.) (eight years)	9,535	40,702
,, (5 per cent.) (eleven years)	66,813	13,574
,, (free) (ten years) ...	63,920	7,314
Machinery, parts of and materials for (dutiable) ...	22,904	3,877
,, ,, (free) ...	154,181	29,098
	£5,832,534	£2,241,087

being a grand total of £8,073,621, or equal to £770,329 per annum.

As there were no records kept of electric machinery for the eight years prior to 1908, or of gas and oil engines for motors for six years prior to 1906, the above total would be considerably increased if the imports for these years were added.

There is an important and very serious general complaint of the difficulty in procuring boy-labour for blacksmithing, boilermaking, and moulding shops—in fact, in many centres it is simply not procurable—and this means a serious menace to these industries. The reason given to me was that lads do not want to become apprenticed to such begrimed and dirty industries. I am convinced—though it is a serious statement to make, and one which opens up a very debatable question—that this state of affairs is largely brought about by too much uniformity in the finishing course of our primary schools, and this is intensified at the junction of the primary and the secondary courses. These should be continuous; but I consider that, at this point, alternative options or divergent opportunities should be afforded to the scholars, on the one hand leading to technical, agricultural, or manual pursuits, and on the other to clerical and literary entertainments. I am also firmly of the belief that if lads in the primary school, from the Fourth Standard up, were given frequent opportunities of visiting not only engineering and mechanical workshops, but also all available manufacturing industries, so as to give them some insight, knowledge, and acquaintance with what manufacturing and its methods really mean, that a very different impression would be created in the minds of the youths from what now obtains, and it would be of immense assistance to them in selecting a course suited to their inclinations when the divergent stage above referred to was reached. The present uniformity in our education system seems to predispose lads for clerical and literary pursuits; and the parents, I fear, are inclined to direct them into these channels, because, perhaps, they are cleaner and less begrimed; but the result is that an oversupply of this class is produced, while few indeed will offer—for want of opportunity of enlightenment—for technical, agricultural, or manual pursuits.

But to return to my subject: It might be, if all the iron industries were busier and in full swing by means of a further protective tariff and constant and regular employment (with good wages earned by boilermakers, blacksmiths, and moulders), that the fathers and others now engaged in these industries might induce their sons and others to follow in their footsteps and to prefer black hands and face and a good wage (with a trade at their command) to a clean collar and indifferent wage in clerical or similar employment.

Regarding the Arbitration and Conciliation Acts, the evidence I have taken, with but few exceptions, goes to show that most of the employers of labour would prefer to return to the old system of "freedom of contract," and this apparently is the opinion of many labour unions also—considering the number of them that have cancelled their registration under the Arbitration Act. Many employers who started under the previous "freedom-of-contract" system have still in their employ good men who have been with them for thirty-five years downwards, and with whom they have never had any trouble, nor have these men had to ask for increase in pay, because ability was invariably recognized and paid for accordingly.

Evidence also goes to show that even now many employers pay good men a much higher wage than the arbitration awards. Their great complaint against the Act is the compulsory clause compelling an equal wage to capable and incapable alike, which they contend is all in favour of the incompetent hand, while the position of the efficient man is not improved. As an example of this I may mention the following: The Arbitration Court stipulated that twelve boxes of small brass castings per day, at 10s., shall be the day's work. An old employee of a certain firm who returned from Australia asked to be put on at the same wage—10s. per day and 1s. per box over the twelve—and he turned out regularly without trouble sixteen boxes per day of eight hours; but the other hands made it so uncomfortable for him that he eventually left and returned to Australia. If the awards are to be of any use to the employers their duration should be for periods of from seven to ten years: this would encourage capital and give greater confidence to manufacturers in enlarging their premises or in installing up-to-date machinery, for they argue that so long as industrial and labour conditions are so unsettled little or no capital can be found for investment in manufacturing enterprises, and so progression is impeded.

Evidence also goes to show that as the Government have given facilities for increasing wages under compulsory employment at high wages to incapable workmen, which must of necessity increase the cost of manufacturing, this is making it daily more difficult to compete with the imported article. It is only therefore reasonable to suppose that the Government will endeavour to increase the tariff sufficiently to meet this increase in cost, so as to enable the manufacturer to contend with the competition of imported articles manufactured under less favourable circumstances so far as wages and other conditions are concerned. If this is not done, surely there will soon be little employment offering for the very men whose position the Government have sought to improve by the compulsory payment of higher wages and improved conditions.

In conclusion, so far as my very careful inquiry and observations have led me, I am persuaded that the real cause of the stagnation in the engineering and iron industries is to be found in the fact that the extra requirements of machinery and implements necessitated by the growth and expansion of this young country have been supplied by imports from abroad, instead of by the established manufacturing industries within the Dominion. As a remedy for this, and without, as I have pointed out, unduly increasing the cost to the consumer, I advise that the tariff should be so amended by the imposition of the duties I have proposed on the several industries I have touched upon, and this should be as speedily brought about as possible, in the interests of not only the engineering and iron industries of New Zealand, but of the Dominion as a whole.

I have, &c.,

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