Evasion or Enforcement – the complexity of the Blockade revisited: The bona fides of the Lavino Company across three continents in 1916

STEPHEN W. A. COBB

Author: Independent researcher Email: Cobb.SWA@gmail.com

ABSTRACT

The 10th Cruiser Squadron in the northern waters between Scotland and Iceland was the physical embodiment of the British blockade of Germany from 1914-17. The real work of the blockade, however, would always take place in Whitehall for it was simply impossible for a boarding officer at sea to know anything of the bona fides of a ship's cargo without significant intelligence analysis and desk research. This article considers the global reach and complexity of these investigations as it relates to a year-long inquiry by British officials into the bona fides of one company in Philadelphia. Spanning three continents, the worldwide business dealings of E. J. LAVINO & Co. are investigated and the means by which the Ministry of Blockade operated are laid bare.

Introduction

It has long been established that the naval and economic 'blockade' of the Central Powers was a key, if controversial, element of British strategy during the First World War. Technically and legally it was not a Blockade since to be 'legal' (i.e. in accord with international law) a blockade was required to be 'effective', and an Allied Blockade could not have been made so in the Baltic. To make it effective, Britain extended the lists of absolute & conditional contraband to an enormous degree, and used the Doctrine of Continuous Voyage to cover the transport of such goods to an ultimate enemy destination. For convenience, this paper will use the shorthand term 'blockade', to be understood as meaning the control of contraband. As the War progressed, Britain negotiated a series of arrangements with groups of semi-official commercial groupings in the northern neutrals, who policed their own members' activities in return for some degree of certainty in their trading arrangements, viz., the carrot of access to the products/markets of Great Britain and the Empire; or the

¹ Archibald C. Bell, A History of the Blockade Against the Central Empires 1914-1918, (London: HMSO 1937, 1961), p. 35.

stick, of vessels and cargoes held up for examination in Kirkwall or the Downs, condemned in the Prize Court, or Welsh bunker coal withheld from their steamship lines. Underpinning this was an enormous and unprecedented level of information-gathering, indexing and desk research, without which the blockade would have been ineffective, illustrated here by the practicalities of the investigations into just one American company, albeit one with worldwide trading links. These investigations echo down the decades even though the world of the card index may seem to have gone forever? In the age of *Google*, we still use transatlantic cabling, and our information processing may be faster, but desk-work is as relevant as ever in contemporary intelligence gathering.

Although not a fashionable subject for consideration during the centenary commemorations, an overview of the historiography of the blockade against the Central Powers can be reasonably succinct.² Most of the existing works that discuss the blockade are general in nature; what they do not tell us is how the blockade was conducted in detail. Some of the 'machinery' was covered by Carless Davis, later Regius Professor of Modern History at Oxford, who served in the War Trade Intelligence Department and Marion Siney gave an account of the negotiations with the Chicago Meat Packers.³ This paper follows her lead by using one case study to re-examine the question of how effective – given British domination of sea and cable communications as well as a worldwide Empire – the strategy of trade embargo could be. As such it addresses just one element of that task of interception, and outlines the attempts made by the British authorities to establish whether strategic metals were being sent from enterprises owned or managed by German interests in Bolivia, covertly up the west coast of South America, transhipped at Panama for New

² As Matthew Seligmann has recently made clear, the Admiralty's original intention was for a close naval blockade of Germany, which would have had the convenience of also establishing an effective commercial and economic blockade. However the vulnerability of British warships to mines and torpedoes led the Admiralty to abandon this mode of blockade by 1912. (Matthew S. Seligmann, 'Failing to Prepare for the Great War? The Absence of Grand Strategy in British War Planning before 1914', in War in History, 2017, pp. 1-24). Seligmann argues that in 1914, the Admiralty regarded this as a means of forcing the German fleet to come out and fight: 'an operational means to a battlefield end' (p. 23), not as 'a decisive assault upon the financial sinews of the German state'.

³ H W Carless Davis, History of the Blockade (Emergency Departments), Foreign Office 1920; Marion C Siney, "British Negotiations with American Meat Packers, 1915-1917: A Study of Belligerent Trade Controls", Journal of Modern History, vol. 23, no. 4 (December, 1951), pp. 343-53.

York, and subsequently via Scandinavia to Germany. Inevitably, in the space available, it is no more than a snapshot.

Key secondary sources that consider this subject include the Official Histories.⁴ Corbett's *Naval Operations*, for example, cover the operations of the 10th Cruiser Squadron, charged with intercepting blockade-runners in Northern Waters. However, by comparison the 'Dardanelles' occupies 75% of Volume II, and some of Volume III, with 'Jutland' prominent thereafter. Fayle's *Seaborne Trade* covers the actions of both belligerents, although it is more concerned with those of Britain. There is only one official history that specifically addresses the blockade: that of Archibald Bell, A *History of the Blockade of Germany and of the Countries associated with her in the Great War, Austria-Hungary, Bulgaria, and Turkey 1914-1918.*⁵ Owing to the post-war controversy regarding the impact of the blockade this volume was not published by HMSO until 1937, and remained not for public consumption until 1961.

Looking wider, the standard general texts on the First World War at sea add little to the debate with the blockade getting short shrift in Marder, From the Dreadnought to Scapa Flow, similarly from Richard Hough, The Great War at Sea 1914-1918, and nothing at all from Geoffrey Bennett, Naval Battles of the First World War.⁶ Sondhaus's more recent wide-ranging Great War at Sea 1914-1918 does cover the diplomatic aspects of relations with the neutrals.⁷ There are a number of histories and memoirs focused on the experiences of the 10th Cruiser Squadron enforcing the blockade at sea but these do not provide useful information on the wider commercial and international complexities it raised.

⁴ Sir Julian Corbett, *Naval Operations*, vol. I-III (1920-23); Sir Henry Newbolt, *Naval Operations* vol. IV-V (1928-31); C. Ernest Fayle, *Seaborne Trade*, vol. I-III (1920-24); Archibald Hurd, *The Merchant Navy*, vol. I-III (1921-29).

⁵ Bell, *History of the Blockade*. Parts of this book, covering the early part of the war, were published in Germany in 1943, as *Die englische Hungerblockade im Weltkrieg, 1914-1915*, edited by Dr Victor Böhmert. Bell's whole (English) book is now available as a reprint from Naval & Military Press, 2013.

⁶ Arthur J Marder, From the dreadnought to Scapa Flow: the Royal Navy in the Fisher era, 1904-1919, 5 volumes, (London, Oxford University Press, 1961-70). Some of the pre-war thinking is covered in vol. I, ch.12; there are a few pages in vol. II, ch.14; and in vol. IV, ch.9; Richard Hough, The Great War at Sea 1914-1918, (Oxford: OUP, 1983); Geoffrey Bennett, Naval Battles of the First World War, (London: Batsford, 1968). See also Marder, The Anatomy of British Sea Power, (New York: Knoff, 1940).

⁷ Lawrence Sondhaus, *The Great War at Sea*, (Cambridge: Cambridge University Press, 2014).

These works aside, the first consideration of the economic blockade actually appeared before the end of the War: George Abel Schreiner was an American journalist given carte blanche to travel in Germany, Austria-Hungary, Romania, Bulgaria and Turkey, and The Iron Ration was a study of the effects of privation. There were also a number of books between the wars, in particular by Consett, Parmalee, Guichard and Arnold-Foster. Consett was attached to the Embassy in Stockholm, and his book was critical of the effectiveness of the blockade. Parmalee was a member of the American delegation to the Allied Blockade Committee, and chaired the Allied Rationing and Statistical Committee. He studied the effects of the blockade on Germany and Austria, and travelled extensively in South East and Central Europe. Lieutenant Louis Guichard was attached to the Historical Section of the French Ministry of Marine, and his book contained some pithy asides from a French perspective on some of the contradictions in British practice. Arnold-Forster was a member of the Admiralty War Staff.

The classic study of the Blockade appeared in 1955. Marion Siney was an American academic whose studies started before the Second World War, when, though she could not see Bell's *Blockade*, she nevertheless had the advantage of meeting Bell and others.¹⁰ Her book only covered the period up to the end of 1916, as she had hoped to cover the remainder of the war in a subsequent volume. There have been other works in the intervening years, but currently the best is Eric W. Osborne's *Britain's Economic Blockade of Germany*, 1914-1919 first published in 2004.¹¹ More recently

⁸ George Schreiner, The Iron Ration: Three Years in Warring Central Europe, (London: John Murray, 1918).

⁹ Montague W. W. P. Consett, *The Triumph of Unarmed Forces*, (London: Williams and Norgate, 1923); Maurice Parmalee, *Blockade and Sea Power*, (New York: E. P. Dutton, 1924); Louis Guichard, *The Naval Blockade 1914-1918*, trans & ed. Christopher R. Turner, (New York: D. Appleton, 1930); William Arnold-Forster, *The Blockade*, *1914-1919*, *Before the Armistice—and After, 1914-1919*, (Oxford: Clarendon, 1939).

¹⁰ Marion C. Siney, *The Allied Blockade of Germany 1914-1916*, (Ann Arbor MI: University of Michigan Press, 1957). See also her "British Official Histories of the Blockade of the Central Powers during the First World War", *American Historical Review*, vol. 68, no. 2 (January, 1963), pp. 392-401.

¹¹ Eric Osborne, Britain's Economic Blockade of Germany, 1914-1919 (London: Frank Cass, 2004; 2nd edition 2013). But see also Maartje Abbenhuis, The Art of Staying Neutral: The Netherlands in the First World War, 1914-1918, (Amsterdam: 2006); Olav Riste, The Neutral Ally: Norway's Relations with Belligerent Powers in the First World War, (Oslo & London, 1965); Avner Offer, The First World War: An Agrarian Interpretation, www.bimh.org.uk

Nicholas Lambert's *Planning Armageddon* shifted the focus by asserting that the real British intention for economic warfare lay in the plan to use a selective embargo on credit to precipitate a controlled collapse of the world economy, which in the process would cripple Germany.¹² If this argument holds true, then as a number of commentators have observed, it also threatened the collapse of the UK such that the strategy was considered dead in the water by the end of August 1914.¹³ Lambert's book is a fascinating study of the British Government's struggle to maintain business as usual while being forced towards total war, but his idiosyncratic view of what (should have) constituted economic warfare risks implying that the actual naval and economic blockade was a second best policy towards which the Foreign Office was at best half-hearted. With this and other works, interest in the blockade has now increased somewhat and half of Greg Kennedy's recent *Britain's War at Sea 1914-1918* is devoted to essays on this topic.¹⁴

In order to demonstrate the limits of blockade and cast new light on the arguments outlined by the various authors previously discussed, this paper focuses on the efforts of the British to monitor the trading activities of one company. The company under consideration is E. J. Lavino and Co. which in 1916 was a manufacturer of ferro-alloys, a product that involved importing ores, notably manganese and chrome. The Company was founded and headed by Edward J. Lavino (1852-1930), and had a number of other partners including Harry F. Lavino and Edward George Lavino. The Company's interests were worldwide where it acted as agent for other businesses including, for example, Electro-Metallurgical, a close associate of Union Carbide. Investigation by the British authorities meant examining its activities from across the globe. In its correspondence and meetings with British authorities in the United States, the Company was represented by Edward J. Lavino. This paper is structured to reflect that pattern of those investigations in each of Lavino's business domains – in Philadelphia, Norway, Brazil, Rhodesia and New Caledonia.

(London, 1989); Paul Vincent, *The Politics of Hunger: The Allied Blockade of Germany 1915-1919*, (Athens OH, 1985); and Lance E. Davis & Stanley L. Engerman, *Naval Blockades in Peace and War: An Economic History since 1750*, (New York, 2005).

¹² Nicholas Lambert, *Planning Armageddon: British Economic Warfare and the First World War*, (Cambridge MA: Harvard UP, 2012).

¹³ Lambert's analysis has not gone unchallenged, see *Journal of Strategic Studies*, vol. 38, no. 7 (2015), "New Interpretations of the Royal Navy in the Fisher Era", papers by *inter alia* Matthew S. Seligmann, David Morgan-Owen and John W. Coogan.

¹⁴ Greg Kennedy (ed.), *Britain's War at Sea 1914-1918*, (Abingdon: Routledge, 2016). See essays by Kennedy, Keith Neilson, T. G. Otte, and John Ferris.

The Workings of the Blockade

The 10th Cruiser Squadron (CS), operating in the waters between Scotland, Iceland and Norway, and guaranteed by the presence of the Grand Fleet at Scapa Flow, was the visible embodiment of Britain's economic war against Germany. The 10th CS was the 'long-stop' (what Archibald Bell called the '...constables and controllers of neutral traffic'¹⁵) in a world-wide intelligence network which communicated details of suspicious movements from New York to the Contraband Committee in London, thence to the Admiralty, through Scapa to HMS *Alsatian*. That this was necessarily so, was summarised by Bell in 1936:

The nature of the cargo and the names of all the consignees could certainly be obtained from the...manifest; and the manifest could be checked by the mates cargo book, and the bills of lading. But a boarding officer had no means of discovering anything at all about the consignees, or the nature of their business, or whether the articles of cargo being carried to them were of a kind that suited with their business...when war began, naval officers in the intercepting squadrons had no means of discovering whether there was anything suspicious in a cargo or its destination....

From the outset, therefore, it was evident to everyone concerned, that our rights of interception would be more exercised from Whitehall than at sea...¹⁶

The strategic metals of particular interest in Whitehall were tungsten (and its ore wolfram), antimony, molybdenum and vanadium, all important in the manufacture of munitions. Tungsten was used for electric filaments, armour-piercing ammunition and machine tools. Molybdenum does not occur naturally, but rather in various oxidation states in minerals. A process for recovering it from ores was only developed in 1913. Production spiked during the First World War when it was used as a substitute for tungsten in the hardening of steel. Antimony was alloyed with lead and tin to improve the alloys used in bullets and bearings. Vanadium is again used to harden steel. Bolivia didn't produce any, Peru did, but its production was wholly under the control of the American Vanadium Company; much of it was repatriated to reserves in the US, via Panama.

¹⁵ Bell, History of the Blockade, p. 35.

¹⁶ Ibid., p. 35.

In implementing the blockade Britain published schedules of contraband materials that could not be shipped either directly or indirectly to Germany. Schedule I listed 'absolute contraband' that was totally banned and Schedule II 'conditional contraband', banned if intended for the use of the enemy state or its armed forces. These schedules were promulgated and extended in a series of Proclamations during the autumn of 1914 until by the Proclamation of 23 December 1914 the vastly expanded Schedule I, to included, amongst other materials:

- 13. Ferro alloys, including ferro-tungsten, ferro-molybdenum & ferro-vanadium...
- 14. Metals, including tungsten, molybdenum, vanadium, nickel...
- 15. Ores, including Wolframite, Scheelite, molybdenite, manganese ore, nickel ore, chrome ore, haematite iron ore, zinc ore, lead ore, bauxite.
- 17. Antimony, together with the sulphides and oxides of antimony. 17

(Tin was added on 11th March 1915, alongside the 'Reprisals Order' of the same date.)

The Lavino Company in Philadelphia

The broad context of the investigation was work carried out on behalf of the Contraband Department of the Foreign Office, into suspected shipments of strategic metals from the west coast of South America, through Panama, to the USA, and

¹⁷ This decision can be traced in the UK National Archive (TNA). TNA FO 372/603, File 82223 indicates a recommendation from the Contraband Committee, which considered it on 6 Oct (File 57575 in FO 372/601). The file contains a memo from F. W. Black, the Director of Navy Contracts, dated 11 Dec, suggesting the inclusion of several metals, ores and their combinations with iron. The Board of Trade concurred the same day. These discussions already took account of enquiries from the US Ambassador regarding the definition of copper, consideration of the various types of iron ore and haematite as contraband (File 64819 in FO 372/602), whether this should include Norwegian iron haematite briquettes (File 62068 in FO 372/602) and an evaluation of the relative qualities of Scandinavian and Spanish ores (File 86800, in FO 372/603). Rear Admiral Edmond Slade (attached to the Trade Directorate of the Admiralty War Staff) and Cecil Hurst (Asst. Legal Adviser to the FO) discussed these additions, *inter alia*, with Admiral Moreau, Messrs Gout and Fromageot (France), M. Sevastopouli (Russsia) and Lord Granville (British Embassy) at the Foreign Ministry in Paris, on 21 December (visited between 19-23 December 1914).

thereupon to the Central Powers. By mid-November 1915, reports and manifests were regularly received from the Legation at Panama of the departure of vessels carrying ores to New York.¹⁸

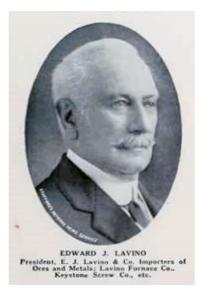


Figure 1: Who's Who in Philadelphia. In Wartime, p. 65

Following a report from Consul Henry Bird concerning the shipments of wolfram from Antofagasta in Chile, 'A Lavino', the 'Sales agents of the Electro-Metallurgical Company' was included on a list of US importers which also included names of more obviously German origin, such as 'Goldschmidt Thermit', 'Rössler Hasslacher', 'L Vogelstein' and 'Müller Schall'. ¹⁹ Ludwig Vogelstein, and the American Metal Company were part of Metallgesellschaft, and Vogelstein controlled the United States Metal Refining Company, of Chrome New Jersey. The Guaranty Trust Company forwarded consignments to them. Consequently all three firms found themselves on the British list. ²⁰ This report was forwarded by the Ambassador, Cecil Spring-Rice,

Primos Chemical Co., NJ E P Earle, 165 Broadway, NYC

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¹⁸ TNA FO 382/19 fo.189484. New York D-368, 16 Nov 1915, pl.

¹⁹ TNA FO 382/19, File 123937, Bird, 30 July 1915.

²⁰ TNA FO 382/19 fo.189484. New York D-368, 16 Nov 15, p1. The others on the list were:

on 26 November 1915, and on receipt it was circulated to appropriate departments of state. ²¹ The Colonial Office asked whether the firm was identical

...with Messrs. Lavino and Company who were favourably reported on by his Majesty's Ambassador at Washington in his despatch No. 753 Commercial, dated the 8th November last, in connection with shipments of chrome ore from New Caledonia, and are receiving chrome ore from Rhodesia.²²

As indeed were the Electro-Metallurgical Company. The Trade Clearing House (TCH) had identified three 'Lavino' businesses, all in Philadelphia. ²³ Most of the information on them came from Washington, and the FO referred the question of their bona fides back to the Embassy. One reference asserted 'Metal merchants. Formerly agents for Prussian mines, but considered reliable'; a second: 'No information, other than that contained in despatches', and a third 'Have received contraband ore (wolfram etc) from German firms in S America'. ²⁴ On 22 January 1916, Vice Admiral Edmond Slade, Vice-Chairman of the Contraband Committee, advised Cecil Hurst, Assistant Legal Adviser to the FO, that both 'F. J. Lavino', and Electro-Metallurgical had signed the required Guarantees against supplying imported ore to the enemy:

I think they are all right as far as we can see. No export of Chrome Ore is allowed to go to the United States without the Guarantee

M E Sandall, 855 Broad Street, Newark, NJ

W R Grace & Co., NY

G Amsinck & Co.

Balbach Smelting & Refining Co. (A subsidiary of American Metal Co.) Newark, NJ

Hopkins & Co., NY

E Weiss & Co., NY

Watjen Toel & Co (a.k.a. S E Nash & L Watjen)

²¹ TNA FO 382/19, fo. 189484, Washington #822 Commercial, 26 Nov 1915; received in the Registry II December.

²² TNA FO 382/505, fo. 1911/5119, Colonial Office, 8 Jan 1916.

²³ TNA FO 382/505, fo. 1911, pp5119. Manuscript note in file, dated15 January 1916 but not initialled or signed. TCH was the 'intelligence department' of the War Trade Department. In March 1916, it became the War Trade Intelligence Department.

 $^{^{24}}$ Manuscript note with information from TCH, as above. TNA FO 382/505, fo. 1911 pp5119.

duly signed coming to me, except exports from French firms in New Caledonia which we cannot control.²⁵

Edward J. Lavino hailed from Smyrna, Turkey. He was educated in Belgium, and was originally in business with his father, exporting native produce to the US. He was first cousin to the William Lavino, who had been Paris correspondent of the London Times, from 1903-08. Mr Lavino came to Philadelphia in 1887, setting up as an agent. The present firm, of 417 Bullitt Building, Philadelphia, and Plymouth Meeting, Pennsylvania, was formed in 1902 to represent British houses dealing in ores. It consisted of Edward J. Lavino, Harry F. Lavino and Edward George Lavino. There was also Edwin M. Lavino, but he was not a partner. ²⁶ In 1895, Mr Edward J. Lavino had been financially embarrassed, but had overcome his difficulties, and the net worth of the firm was subsequently identified as \$850,000. Among their assets, as of 7 February 1916, were \$119,000 of investments, representing holdings in the various British and foreign firms for which the firm acted as agents. ²⁷ Summarising, Edward J. Lavino was the founder of E. J. Lavino & Company, which included others members of his family. At this time he was Chairman of the Board, and appears to have represented the company in all its dealings with British officials. ²⁸

²⁵ TNA FO 382/505, fo. 1911/5119. Slade, 24 Jan 1916. Slade was attached to the Trade Division of the Admiralty War Staff.

²⁶ TNA FO 382/505, fo. 24304, Washington teleg #398 ('Trade and Treaty'), 7 Feb 1916. Following a letter from John J. Broderick, Consul-General in New York, the Electro-Metallurgical Company was interviewed, and subsequently detailed its affairs in a 10-page letter, covering its relationships (or absence of them) with other suspect firms on the list. See Broderick to Richardson (Philadelphia) 31 Jan 1916; and EF Price, VP & GM, Union Carbide, & President of EMC, 7 Feb 1916. Both in TNA FO 382/526, fo. 45935.

²⁷ The Chrome Company, Ltd., London The Rhodesia Chrome Mines, Ltd., London Chalas & Sons, London F. DuPre and Company, London Lavino, Keun & Co., London George G. Blackwell, Sons & Co., Liverpool Societe Coloniale Anversoise, Antwerp Keun, Lavino & Co., Smyrna, Turkey-in-Asia Paterson & Co., Smyrna

²⁸ He died in 1930. After the war the company expanded into shipping. The refractory and ferro-manganese interests were acquired by International Minerals and Chemical Corporation in 1966.

It took most of 1916 for the Contraband Department to establish Lavino's *bona fides*, and it remained unhappy about his 'frankness'. He was interviewed by Charles Perceval, Consul-General in Philadelphia, (probably on 25 January), who considered him 'perfectly frank and open', and Hugh Alex Ford, Acting Consul-General, in late-April, in June, on 25 August, and probably early October 1916.²⁹ Ford broadly agreed with Perceval's assessment.

Lavino: 'guilt by association' and associates in Scandinavia

Lavino's initial problem was his appearance on a list of German-American metal importers, but expanded to include his position as sales agent for the Electro-Mechanical Company (EMC). Like Lavino, Electro-Mechanical imported chrome ore from Rhodesia, and had signed the necessary guarantees. EMC was virtually indistinguishable from the Union Carbide Company that proposed to erect new plant near Stavanger, in Norway. The Washington Embassy knew nothing definite about EMC, but thought this plant should be investigated, instructing the Christiania (Oslo) Embassy to do so.

Interviewing representatives of EMC in the United States provided a 'lengthy and interesting account of their dealings and connections', which in the Ambassador's opinion, cleared the firm of any suspicion of directly or indirectly trading with the enemy. Nevertheless, Broderick, the Consul-General in New York, sought answers to a number of questions in an effort to clarify the relationship of EMC to the Union Carbide Company. This included asking for the names of directors; whether the directors and their stockholders were purely American? Where the capital for the Norwegian plant came from? Would its total product be shipped to the US? Did the firm manufacture, now or in the past, chlorine or chloride of lime in the US? Would the Norwegian plant do so, or manufacture anything else besides calcium chloride? Would all the materials for the plant be found in Norway, or would some materials be exported there from the US?

The answers, following a letter of 3 February and a visit to New York, were provided in a 10-page submission from Mr E. F. Price, Vice-President and General

FO, 24 February 1916.

²⁹ TNA FO 382/506, fo. 97400, Ford replies to Washington on 29 April; 15 June TNA FO 382/526, fo. 124942, Despatch #144; 15 August FO 382/526, fo. 190717. ³⁰ TNA FO 382/526, fo. 45935, Letter from Ambassador, Sir Cecil Spring-Rice, to

³¹ TNA FO 382/526, fo. 45935, John J. Broderick, to Richardson (Philadelphia) 31 January 1916.

Manager of Union Carbide (UCC).³² This revealed that the company had been formed in 1898 under the laws of the State of Virginia; it was and always had been engaged in the production of calcium carbide for supply to the acetylene industry, principally within the boundaries of the USA. It had outstanding capital stock of \$21,000,000. Control of the company was held by a large majority within the directors, officers, their immediate families and close friends and associates.³³ The minority was scattered among a thousand small shareholders. Virtually all of it was held by American citizens. Neither UCC nor its subsidiaries had any contractual or other relationship with any European concerns.

These investigations showed that both Electro-Metallurgical Co., and Electric Furnace Products Company (in Norway) were wholly owned by the Union Carbide Company and that the management of both was practically identical with UCC.³⁴ EMC were, broadly speaking, engaged in the production of ferro-alloys in electric furnaces; its operations were almost entirely confined to the manufacture of ferro-chrome and ferro-silicon, sold almost exclusively to steel manufacturers in the US. They had never exported any ferro-silicon. The chrome ore obtained by UCC from Rhodesia was used for the manufacture of ferro-chromium, and none of the product was sold to any buyer who would not sign the approved British Admiralty guarantee, even if they only wanted a few pounds for experimental purposes. At the start of the war, the company had refrained from selling outside the USA, even before the introduction of the Admiralty regulations. The only exceptions had been to supply the occasional small demands of Canadian steel manufacturers when requested, and two or three small lots of low-carbon ferro-chromium to the Russian Government (negotiated by their British agents, Everitt & Co., 40 Chapel Street, Liverpool).

Price asserted that, from 5-10 years previously, UCC had supplied, through Everitt & Co., a very considerable proportion of the ferro-chromium consumed by British armaments manufacturers – ultimately destined for the Royal Navy. In the past five years, their sales had evaporated in face of low prices quoted by competitors in

³² TNA FO 382/526, fo. 45935, E. F. Price 7 Feb 1916, Papers on a separate file, FO 382/531 indicate that during this meeting in New York Mr Price also passed on his firm's suspicions regarding the activities of other metal dealers in the New York area, which led to a parallel investigation into metal purchases and shipments linked for the 'merchant submarine' *Deutschland*.

³³ Ibid., p. 2.

³⁴ Ibid., p. 3.

France, Switzerland, Norway and Sweden, several of them controlled by German and Austrian interests:³⁵

...we have not, during the past year, either purchased, imported, sold or shipped any tungsten ore, and we have no such ore, nor any tungsten metal or alloys in stock or under contract or consideration. The above explanation with respect to tungsten also applies generally to ferro-vanadium and ferro-molybdenum.³⁶

Lavino had been sales agents for EMC for a number of years and represented EMC in negotiations for the sale of their ferro-alloys. The contracts so negotiated were not valid until signed by EMC which retained full control over sales policy who determined the conditions and details of any sales that were made.

Scandinavia: The plant in Norway

EMC were aware of the remarkable progress in developing economical hydroelectric power and its use in the manufacture of various electro-chemical products. They had become interested in the possibility of establishing a plant of their own after the passage of the US Tariff Act in 1913.37 Following Price's own visit to Norway in 1913, and extensive investigations and negotiations, EMC had contracted with a Norwegian power company to develop this hydro-electric power, and dispose of it to the Electric Furnace Products Company (EFPC). The Norwegian power company was Aktieselskabet Saudefaldene of Saude, whose charter provided that only Norwegian citizens could hold its shares. The concession from the Norwegian Government required that control of EFPC could never pass from American, Canadian or Norwegian citizens. Contractually, no power delivery could occur before early 1918; construction of EMC's own plant had scarcely begun, and was delayed. The intention was to produce solely calcium carbide, and to ship it to Union Carbide in the USA. Less than 10% of UCC's total output was for export, chiefly to the West Indies, Central and South America. They had never made any attempt to dispose of it either in the United Kingdom or Continental Europe and did not now contemplate doing so. It was barely possible that their small amount of export trade could be supplied from Norway, but that would depend on freights and other transportation costs at the time. The Company had no intention of manufacturing

³⁵ Ibid., p. 4.

³⁶ Ibid., p. 5.

³⁷ Revenue Act of 1913, a.k.a. 'Tariff Act, or 'Underwood Act'. Key element of Woodrow Wilson's platform in 1912. Re-established federal income tax following ratification of the 16th Amendment to the Constitution. Reduced the basic tariff from 40% to 25%, and vastly expanded the 'free list'.

chlorine or chloride of lime, and could not do so, as this would require a direct current (DC) supply of electricity, and the plant was to be supplied with alternating current (AC).

The materials required by the Saude factory would come from Norway; the concession stipulated a premium to use anything else. However, structural steel and key building supplies, specialist components for the plant, might have to come from the US. To produce calcium carbide EMC would require limestone from Norway as well as coal and coke from Great Britain or the USA, depending on which source would be cheapest. They hoped the war would be over before the necessity of buying these materials. The capital for the EFPC plant would be furnished by Union Carbide as required. Mr Price concluded his submission by reaffirming that, 'Neither Union Carbide Company nor any of its subsidiary Companies have at any time manufactured, in this country or elsewhere, chlorine or chloride of lime, nor is the manufacture of any such products contemplated'.³⁸

Lavino: Manganese from Brazil and a contact in Berlin

Lavino found itself under examination as a result of its connections to EMC and UCC. However, concern in Whitehall also emerged as a result of Lavino's relationship with a company in Rio de Janeiro, the *Société d'Enterprises Générales au Brésil* (SEGB), managed by E. O. Schmitt. This in part arose out of regular observations by British embassy officials in Brazil who, on 7 April 1916, reported that, 'Schmitt Manager of Thun local manganese exporter has boasted that it is easy to smuggle manganese to Germany. All his recent shipments were to United States... consignees generally E. J. Wavino (sic) and Company of Philadelphia'. This report named the SS *lowan*, and five other vessels that were used to make the shipments. 40

³⁸ TNA FO 382/531, E. F. Price submission, p. 10.

³⁹ TNA FO 382/506, fo. 66870, Rio #38, 7 Apr 1916.

⁴⁰ SS *Iowan* (1914): one of eight sisters built by the Maryland Steel Co. for American Hawaiian SS Co. Rammed and sank UFC's *Metapan* in the Ambrose Channel, 15 Oct 1914. One of a group chartered to South America, supplying coal, gasoline and steel, returning with coffee, cocoa, rubber, nitrates & manganese. USN 1918-19; requisitioned 1942; transferred to USSR under Lend-Lease as *Tashkent*. Transferred to North Korea in 1966 and scrapped there 1969. The other vessels named were SSs *Atlantic*, *Stephen Jones*, SV *Singleton Palmer*, SV *Ruth E Merrill* & 'Winslow' (SV *Edward B Winslow*?).

The War Trade Intelligence Department had wireless intercepts apparently showing a relationship between SEGB with a Danish citizen, 'A Thun', then resident in Berlin.⁴¹ On 2 October 1914, Lavino had received a letter from Schmitt, per pro Thun, advising him that 'my Rio firm had been converted on I July into SEGB, with the same contact details (P.O. Box & telephone numbers)'.⁴² Mr Edward J. Lavino originally claimed that this conversion occurred several years previously, but that locally, SEGB was still referred to as 'Thun'.⁴³

Investigations by the British officials subsequently revealed that Lavino had purchased manganese for 15 years from the Société Coloniale Anversoise (SCA) formerly of Antwerp, but now of Mincing Lane, London. 44 Their General Manager was a John Vander Taelen, of Mincing Lane. SCA controlled the Société Anonyme des Mines de Manganese d'Ouro Preto au Brésil (henceforward 'Ouro Preto'), whose stock was virtually wholly-owned by Vander Taelen. What this revealed was that the SCA's representative in Brazil was Thun. Some three or four years previously, Thun had purchased a manganese mine of his own, and shipped the ore to Lavino alongside that of Ouro Preto. In October 1914, SEGB became local agents for SCA.⁴⁵ Edward J. Lavino & Co had been taking 50% of the output of SCA's manganese mines, with the other half going to the US Steel Corporation. Lavinos hoped that if His Majesty's Government (HMG) took exception to his transactions with Thun, they would not ignore similar transactions by US Steel. 46 Payment for ore shipped had been made either direct to SEGB, or when requested, to their account at the Guaranty Trust Company of New York. Guaranty Trust was a bank regarded with considerable suspicion in London.⁴⁷ Lavinos also enquired about HMG's attitude to the American Metal Company (AMC), which had asked him to quote for 20 tons of ferro-tungsten, assuring him that they were well-regarded, and regularly imported from British sources. On being informed that AMC were not on the Statutory Black List, Edward

⁴¹ TNA FO 382/526, fo. 141044, 27 Jan 1916; 1 Mar 1916. War Trade Intelligence Department, 19 July 1916, ref AS 36960.

⁴² TNA FO 382/526, fo. 141044, Philadelphia #472, Lavino also received a letter from Schmitt, SEGB Société Anonyme, that same day, 15 Aug 1916.

⁴³ Note from Hugh Alex Ford, Philadelphia, to Robert S Hudson, 3rd Secretary at the Embassy, dated 29 April 1916. TNA/FO 382/506 fo. 97400.

⁴⁴ Hugh Alex Ford to Francis G Osborne, 3rd Secretary, 15 Aug 1916, TNA FO382/526, fo. 190717.

⁴⁵ TNA FO 382/526, fo. 141044, Philadelphia #472.

⁴⁶ Ibid., p. 3.

⁴⁷ As the consignee of many suspect metal shipments from the west coast of South America.

J. Lavino wryly observed that the 1914 Handbuch der Deutschen Aktien-Gesellschaften referred to AMC as a Tochter-Gesellschaft (affiliate/subsidiary) without qualification.⁴⁸

Edward J. Lavino claimed that Thun, a Danish citizen, had been arrested in Berlin, and charged with trading with the enemy (in manganese ore). The Danish Government had made strong representations on his behalf, and he had been released on a bond of one million marks, and forbidden to leave Germany. Some three months previously, Lavino had been approached by a mysterious American ("whose name he alleges he has forgotten") en route from Berlin to Rio, to inspect an iron ore mine belonging to Thun, on which he had an option.⁴⁹ Through him, Thun asked for a letter to show the German Government, stating that all the manganese ore bought by Lavino from him had been used within the USA, in order that his bond be cancelled, and he be permitted to leave Germany. Later, Edward I. Lavino would recall that the American's name was Morgan, and that he had learned of Thun's alleged plight from SCA's Vander Taelen, in London. 50 He had attempted to secure more supplies of ore, to address the serious shortage of ferro-manganese in the USA, where prices had risen from \$40 to \$400 a ton. There were only three sources of manganese ore: India, embargoed by the British; the Caucasus, blocked by the Dardanelles; and the smallest source, Brazil. Lavinos had always been the sole importer of Brazilian ore, and resorted to extreme measures to guarantee supply. Having bought from Ouro Preto, Edward J. Lavino entered a large contract with Moro de Mina Mines, and bought 60,000 tons from SEGB. He met Vander Taelen in London, in November 1914, travelling First Class on the Lusitania, and returning to New York on her in February 1915.51 But Vander Taelen would then only sell the Ouro Preto output if Lavinos supplied the ships, as these were otherwise almost unobtainable. Lavinos had refused to write a letter for Thun, as producing Allied munitions was precisely the use to which SEGB's ore had been put. While sorry for his predicament, he could not help him, and referred 'Morgan' to US Steel Products, the subsidiary of US Steel which had bought the other 50% of SEGB's ore.

⁴⁸ TNA FO 382/526, fo. 190717, Philadelphia #464 to London, New York and Washington, 14 Aug 1916.

⁴⁹ TNA FO 382/526, fo. 141044, Philadelphia #472.

⁵⁰ TNA FO 382/526, fo. 190717, Lavino, 6 Sep 1916. .

⁵¹ This part of the statement is confirmed by passenger lists in the National Archive. Arr. 10 Nov 1914, *UK*, *Incoming Passenger Lists 1878-1960*; arr. New York, 20 Feb 1915. New York Passenger Lists 1820-1957. Both, National Archives, accessed 13 Dec 2014.

Careful work by Whitehall officials supplemented by fieldwork and interviews helped to explain various intercepted telegrams. Thus a telegram of 27 January 1916, for \$375,000, referred to Lavino's contractual obligation to pay 75% of a provisional invoice if upon delivery of ores to Rio, his ships were not available.⁵² In a telegram of I March, a request for \$60,000 to SEGB, had been paid through the British Bank of South America in Rio two days earlier, and could be ignored.⁵³ A further cable, on 17 June 1916, allegedly sent by Thun, sought Lavionos' authority to sell 15,000 tons of ore in excess of contract. No reply was ever received, and a few days later the ore was sold to US Steel.⁵⁴

French suspicions interfere with chrome shipmentsfrom Rhodesia

The Foreign Office (FO) had shared the correspondence about Union Carbide, Electro--Metallurgical and Lavino with the Colonial Office. The Lavino Company were agents for the Chrome Company in the USA, and had been importing and distributing ore to the smelters since March 1915. Lavino had requested permission from the French (through the US Embassy in Paris) to import chrome ore from New Caledonia, citing their existing authorization from the British to import Rhodesian ore via Beira in Mozambique. On 30 May, the FO had been advised that 'the French Government was not inclined to welcome a request ...formulated by the Lavino firm'. The French attitude, the FO's doubts, and an Admiralty suggestion that shipments be withheld pending clarification over Thun, made difficulties for Lavinos, who complained to the US State Department. This prompted an intervention from Vice-Admiral Slade at the Admiralty. While the Admiralty had no interest in any specific contract with Lavino, it wished to remove obstacles, and the immediate concern was a shipment on the SS Chepstow Castle, loading at Beira. If she was not allowed to sail there would be a heavy bill for demurrage.

⁵² TNA FO 382/526, Philadelphia #472.

⁵³ Ibid., Lavino, 6 Sep 1916, p. 5. And also to Fourth National Bank of Philadelphia.

⁵⁴ Ibid., Lavino, 6 Sep 1916, p. 6.

⁵⁵ TNA FO 382/526, fo. 14388, 17 March 1916. Referred to in FO letter to CO, 28 July 1916.

⁵⁶ Ibid., French Embassy, 30 May 1916. ('le Gouvernement Francais n'était pas disposé à accuellir une demande de minerai d'emeri formulée par la Maison Lavino…')

⁵⁷ Ibid., II Aug 1916.



Figure 2: SS Chepstow Castle (1913) (Collection of the Clyde Shiplovers' Society in Glasgow, with thanks to Paul Strathdee.)

It would be some weeks before she could reach Baltimore, and Slade suggested she be allowed to proceed, and if Lavino could not have the ore, the consignment could be changed by telegraph. The Chrome Company would make out the papers 'to any person we designate'. George Kidston at the Foreign Office commented: this was the first indication that the Admiralty were interested in the matter: 'It would greatly simplify matters if the Departments concerned with contracts would keep us informed of the foreign firms with which it is important that there should be no interference'. Kidston can hardly have been unaware of Slade's wider role in the Blockade machinery, but his exasperation suggests the strain caused by the demands of information gathering and processing. The Colonial Office was in discussion with the War Trade Department (WTD) regarding further shipments, but left the decision on delivery to the FO. A further 1000 tons would be shipped from Beira on the Norwegian 4-masted barque Skansen 1.

⁵⁸ TNA FO 382/526, fo. 143881, Slade, 12 Aug 1916.

⁵⁹ Op.cit., 11 Aug 1916.

⁶⁰ See Lambert, *Planning Armageddon*, p. 500.

The French were told that while the FO was not altogether satisfied with Lavino's explanation, there was no evidence that he had exported material to Germany, directly or indirectly, and supplies could go forward under safeguards and restrictions. ⁶¹ Within Government, the attitude was less emollient: Lavino had been given a 'salutary warning'. ⁶²

Edward Lavino was almost incredulous. On 6 September he wrote to Broderick, hoping the FO would appreciate that he had acted to prevent a stoppage in the US steel industry. In purchasing ore from SEGB, his firm 'could not for a moment suspect' that anyone would believe they were helping the enemy. First, how would it do so? Second, the ore, no matter how obtained, was being used to ensure that US steelworks continued to produce materials for the Allies. Third by purchasing the Ore, Lavinos has prevented it from being acquired by a party that might have been willing to transport it to the enemy by some 'subterranean' means. Finally, Messrs Lavino had invested every dollar, above that needed for the firm's capital, in Anglo-French and Russian bonds, most recently the previous week. The company was invested in the war. If they had not been so committed to the Allies then they might have preferred to invest in American securities.⁶³

As he instructed the Chrome Company not to transact business with Lavinos, nor to deliver ore already bought, paid for, and currently on the high seas Mr Broderick, the British Consul-General in New York, fully understood Edward Lavinos' annoyance. The first consignment, aboard York Castle, was imminent. Lavino conceded that the 'Rio Manganese business' might have looked doubtful, but he nonetheless asked for Broderick's help in persuading the FO to withdraw its instructions. Any interruption in supplies might prevent US steelworks from fulfilling munitions orders. A week later, Broderick's representations led to the recommendation that ore shipments be resumed, subject to the provision of evidence to Britain's Consul-General in Philadelphia that various guarantees were faithfully observed.

Back in London, the War Trade Intelligence Department expressed its view on three occasions that there were no grounds whatever for objecting to delivery of the ore.⁶⁷ The FO felt that Vander Taelen should be interviewed by the Foreign Trade

⁶³ 300,000 roubles; \$25K in Anglo-French bonds.

⁶¹ TNA FO 382/526, fo. 170664, FO to French Embassy, 5 Sep 1916.

⁶² Ibid., FO to CO.

⁶⁴ TNA FO 382/526, fo. 190717, Lavino(2) 6 Sep 1916

⁶⁵ Union Castle Line, built 1901, 5517 tons.

⁶⁶ TNA FO 382/526, Washington #1159 Commercial, 13 Sep 1916.

⁶⁷ TNA FO 382/526, fo. 220085 28 Nov 1916; TNA FO 382/526, fo. 241559, H. W.

Department, to establish who he and Thun really were, but Lavino had 'had a good fright in the past & his dealings seem to be so closely observed by the Embassy, that it is probably safe to let him have ore under guarantee'.⁶⁸

Lavino alleges discrimination by the French Government

This might have settled the matter, but Edward Lavino now alleged discrimination by the French Government in the way it awarded consignments of chrome ore from New Caledonia to various companies. Lavinos could transport the ore, but the French authorities would not permit the company to act as the consignee, as they were ineligible to sign the Consumer's Guarantee. This restriction hampered Lavinos' capacity to manufacture chrome cement – a material used to line Open Hearth furnaces in steel works – at its own plant. Annoyed at not being offered a chance to purchase chrome ore directly, Edward J. Lavino decided to investigate the activities of those organisations that the French Government was prepared to engage.

To this end, Edward J. Lavino investigated the shipments made to the United States Nickel Company, New Jersey (USNC) from New Caledonia by the French firm *L Ballande Fils* of Bordeaux. The owner of both USNC and a number of large nickel mines in New Caledonia, M. Ballande was a wealthy French Deputy, a prominent member of the Catholic Party, and a banker.⁷⁰ The USNC plant at New Brunswick,

Carless Davis, 29 Nov 1916, and 2 Dec 1916. See also TNA FO 382/526, fo. 197823, W. H. Penson, Chairman WTID, 3 Oct 1916. The War Trade Intelligence Department (WTID, formerly the Trade Clearing House) collected information on all aspects of the blockade, and furnished it to all the Departments concerned with it. The Foreign Trade Department (FTD) supervised the financial relationships of the blockade, e.g. in directing banks to withhold credits; it also had charge of the Statutory Black List (SBL), which listed firms or individuals with whom British citizens were forbidden to trade. WTID came under the War Trade Department (WTD), which was responsible for issuing export licences for commodities exported from Great Britain. WTD was also responsible for the General Black List (GBL) which unlike the SBL was secret. On the GBL, individuals and firms in 'Class A' were denied access to shipments, cabling and correspondence, as enemies; in 'Class B', they were under surveillance, and usually denied such facilities. Information for the GBL was provided by WTID. See e.g. Maurice Parmalee, Blockade and Sea Power, (New York 1924), Chapter VI.

⁶⁸ TNA FO 382/526, fo. 219417, W. V. Cooper to G. Kidston, 2 Nov 1916.

⁶⁹ TNA FO 382/526, fo. 212203, 5 Oct 1916.

André Ballande (1857-1936). Deputy of the Gironde 1902-1924. Sometime Deputy
www.bjmh.org.uk

NJ had been erected to make nickel from nickel ore, but had never worked a ton of chrome ore. What became clear to Edward J. Lavino was that Ballande was using his businesses so as to appear to be a consumer of the ore he imported. However, in fact the USNC preferred to sell its imports to a commission house – Naylor & Co., of New York – which in turn sold some of the ore on to Lavinos. Lavinos would then manufacture chrome cement and deliver this to various steel works once a British Guarantee had been signed.

Lavino further alleged that intermediaries had attempted to interest Electro-Metallurgical (for whom he was Sales Agent) in another cargo, which otherwise would supply Goldschmidt Thermit, a company on the British Black List. Ballande appeared to be selling indiscriminately in the US, and, Lavino hinted, had sufficient political influence to enter into transactions at the expense of his competitors. In Edward J. Lavino's opinion the French Government were wrong to deny ore to Lavinos while allowing shipments to USNC.



Figure 3: André Ballande (1867-1936) (Agence Role, 1914). Wikimedia Commons, accessed 24 August 2016

Having seen the case made by Edward J. Lavino, the British Embassy told him to take the matter up with the French authorities. ⁷¹ At the FO, Kidston doubted the advisability of saying anything to the French Embassy as he recognised that, 'The question of interfering with supplies to a French banker & deputy is rather a delicate

Mayor of Bordeaux. See, https://fr.wikipedia.org/wiki/André_Ballande. Accessed 17 May 2016.

⁷¹ TNA FO 382/526, fo. 212209, #219FT, Washington (Spring-Rice), 13 Oct 1916.

one.'72 But Edward Lavino's actions, and the resulting ripples from Washington and Paris, meant that the FO received a letter from the Ambassador, Paul Cambon, less than two weeks later.'73 In response, Sir Edward Grey recommended that the French adopt British procedures, such that consignments should be made to a French consular official who would exact the necessary guarantees before releasing ore to Lavino.'74

On I December, the Admiralty observed that *Ballande Fils* were responsible for the difficulties in exercising control over dealings in chrome ore in the USA, and not the Lavino Company. USNC were associated with *Metallgesellschaft*, through the French company *Le Nickel*. The British Government could prevent undesirable transactions in nickel, but only Ballande could obtain guarantees from USNC in respect of chrome ore. The Admiralty subsequently suggested that the British Embassy in Paris should be provided with details of Lavino's difficulties, in an effort to persuade the French Government to bring pressure to bear on Ballande. To this end, on the day the Asquith Coalition fell (6 December 1916) Lord Eustace Percy at the Foreign Office minuted 'We had better tell...Cambon that we are troubled at present about M. Ballande and give him the substance...But write in a conciliatory form which won't give M. Cambon the impression that we are attacking Balland'.⁷⁶

In the event, the letter from the Foreign Office was quite robust:

...the fact, if true, that New Caledonian ore can pass through the United States Nickel Company into the hands of buyers in the United States who give no guarantee and over whom no control is exercised by the Allied governments, appears to constitute a serious danger, especially in view of the possibility of submarine shipments to Germany from the United States as the United States Nickel Company is understood to be connected with the French company "Le Nickel" as well as with Messrs. L. Ballande Fils, the shippers of the ore, the French Government are doubtless in a

⁷² Ibid., Kidston, 25 Oct 1916.

⁷³ Ibid., fo. 225114, Paul Cambon, 8 Nov 1916.

⁷⁴ Ibid., Grey, 16 Nov 1916. The conditions had been explained to Cambon in earlier notes of 7 Aug and 5 Sept 1916.

⁷⁵ Ibid., fo. 243014, W Graham Greene, I Dec 1916.

⁷⁶ Ibid., Percy, 6 Dec 1916.

position to avert this danger by instituting a proper system of ${\rm guarantees.}^{77}$

Conclusion

This paper has highlighted the investigations by the Contraband Department (later the Ministry of Blockade) into one American company. For the protagonists these investigations took the best part of 1916, and involved looking into the work of agents and shippers of a number of strategic metals (e.g. wolfram, tungsten, molybdenum, vanadium) as they were transhipped from South America, and to those to whom they were consigned in the United States. Since the ideal 'containers' for shipping those metals were jute bags, the focus could be, and was, then broadened to include the attempts to control the supply of jute and jute products from the Empire to such agents and shippers whose business dealings were under suspicion. Spanning multiple departments and jurisdictions, civil servants found themselves engaging with: Brtish Embassies at Paris and Washington and the Consulates-General at Philadelphia and New York; the Legation at Christiania (Oslo); the American and French Embassies in London; the Admiralty, Colonial Office (and through them, the High Commissioner for South Africa), the Foreign Trade Department, and the War Trade Intelligence Department.

Nicholas Lambert asked whether 'the administration of the blockade required a level of information gathering and processing that far outstripped what was available to the British state.'⁷⁸ Earlier in this paper it was suggested that his 'Armageddon thesis' risked an implication that the actual naval and economic 'blockade' (the control of contraband) was a 'second best' policy towards which the Foreign Office was at best half-hearted. This study of the investigations into the Lavino Company shows just how committed and thorough the Foreign Office was, tracing Lavino's commercial relationships across four continents for most of 1916, using all the resources at its disposal – diplomatic and consular staff, liaison with other Departments, cables, intercepts and intelligence. The investigation into the Lavino Company is a prism that allows us to see the various facets of 'contraband control' during the First World

http://www.colorantshistory.org/SubmarineDeutschland.html;

https://en.wikipedia.org/wiki/Merchant_submarine; and Leut Aaron Matzkows, 'Sub designed to beat WWI blockade' www.defence.gov.au. All sites accessed 23 Aug 2016.

⁷⁷ Ibid., FO to Cambon, 8 Dec 1916. The 'possibility of submarine shipments' likely refers to the contemporary voyage of the merchant submarine *U-Deutschland* to Baltimore, with a cargo of aniline dyes, medical drugs and mail. On her return to Germany she carried 341 tons of nickel, 93 tons of tin and 348 tons of rubber. See

⁷⁸ Lambert, *Planning Armageddon*, p. 499.

War, and the commitment of the Government towards maintaining it. The implications of that policy may not have been fully appreciated on 4 August 1914, but its execution by 1916 was not half-hearted.

As Seligmann recently reminded us, only after the 'Reprisals' Order of 11 March 1915 was the more ambitious goal 'of cutting Germany off entirely from global commerce and bringing victory through economic dislocation' then being articulated within Government. The means for undertaking this economic dislocation nevertheless 'had to be learnt the hard way, and the structures of implementation built from scratch'. 79 This was a slow and difficult process, subverting long-accepted legal norms under the eyes of watchful neutral states. John Ferris argues that blockade was the Foreign Office's central task during the war, and among its greatest triumphs. It rested on Anglo-French seapower, and control over maritime cables. German transatlantic cables were destroyed, and the US agreed that its neutrality was incompatible with permitting the transmission of wireless messages in secret. Between 1914 and 1915, Britain read most of the messages crossing the Atlantic, and from 1916-19, all of them, in plain language!80 By 1918, 80,000,000 cables had been read, 25,000,000 wireless messages, and 630,000,000 postal packets opened, containing perhaps one billion letters!⁸¹ As this article has shown, the administration of the blockade by the War Trade Intelligence Department represented 'the triumph of data processing for intelligence in the age of the card index'.82

Epilogue: And what of the elusive Mr Thun?

I am grateful to Michael Clemmesen for establishing that correspondence between Mr Thun and the Germans does exist within the Danish Legation in Berlin (Jan 1915-

⁷⁹ Seligmann, 'Failing to Prepare for the Great War? The Absence of Grand Strategy in British War Planning before 1914', War in History, Jan 2017, p. 22.

⁸⁰ John Ferris, 'Issues in British and American Signals Intelligence, 1919-1932', Part 1: Reading the World's Mail: British Censorship, Communications Intelligence, and economic Warfare, 1914-1919, pp. 1-22. United States Cryptologic History, Special Series, vol. 11, 2015. National Security Agency, Cryptologic History website, www.nsa.gov. Accessed 28 Apr 2017.

⁸¹ 'The War Trade Intelligence Department and the Blockade of Germany 1915-1918' (Keynote Speech to PhD Conference, Brunel University, 25 April 2017), and email to author, 28 April 2017. See also, 'Pragmatic hegemony and British economic warfare, 1900-1918: preparation and practice' in Kennedy, (ed.) Britain's War at Sea, 1914-1918 - The war they thought and the war they fought, (Abingdon: Routledge, 2016), pp. 87-109.

⁸² Ferris, 2011, op.cit.

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Dec 1916). The Legation files suggest that Mr Thun was well regarded in Germany as he had sponsored pro-German propaganda. In late 1916, he asked Graf Rantzau, Minister to Copenhagen, for a list of all Danes working in Germany.⁸³ A letter from 'A Thun' to Foreign Secretary Jagow, dated 19 Sept 1916, thanked him fulsomely for the presentation of 'an exquisite vase' for the work he had done for the relations between his *Chosen Homeland Germany*, and his *Fatherland Denmark*, for which he would continue to give his strength and financial resources.⁸⁴

⁸³ Email to author, 19 Feb 2015.

⁸⁴ Rigsarkivet, Copenhagen, Denmark. 860 Håndskriftsamlingen XVI. Danica. Auswärtiges Amt 56. I am grateful to Michael Clemmesen for this reference, and for the assistance given him by Otto Schepelern, former Chief Archivist of the Danish FO. I would also like to thank my friend Siglinde Eiberle for translating the letter for me.