
Lead seals of Russian origin in Fife

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Introduction

Lead seals are known from various countries in Europe (Endrei & Egan 1982, 47–75), and although attention has been drawn to Russian seals in museums in England and Ulster, generally little if any detailed attention has been paid to them. They are typically referred to in archaeological and metal detection reports as ‘of foreign origin’ or ‘Russian flax bale seals’ and no further information is offered, save that they bear Cyrillic letters and other numbers (Coleman & Cox 1996, 94). Closer examination, however, shows that many seals carry a great deal of information, including their origin, the contents of the bales they sealed and the initials or names of owners and inspectors in Russia who were responsible for overseeing the proper export and quality control of the bales to which they were attached. The seals are lead or usually lead alloy, containing lead and varying amounts of tin, and bear two-sided imprints of stamps.

The chief aim of the present article is to provide a preliminary guide to their identification, and to set out the different characteristics by which seals from different Russian towns can be recognised. It also points out some of the changes which the design of the seals underwent during the two-and-a-half centuries of their existence.

Many Russian lead-alloy seals are now being discovered in or near the fields, gardens and ancient dwellings of Fife and other parts of Scotland. They were attached to bales imported into Britain and were eventually thrown out with the woody part of the stem to be mixed with manure or night soil removed from the open streets and sold to local farmers as fertiliser or to treat the land (Gauldie, 1969). This served to renovate the soil by lightening the heavy soils which are to be found in some areas of Fife or to bind together the more friable soil of other areas. Many of them have lain in the ground for over a century and have been damaged, sometimes severely, by ploughshares and corrosion.

Fife Council Museums (East) has 233 Russian bale seals which form the main body of material investigated in the present study. They were attached to bales of flax or hemp and carry dates ranging from the 1780s to the beginning of the twentieth century. The seal bearing the earliest legible date is from 1788, the latest having a date in the first decade of the twentieth century, probably 1908.

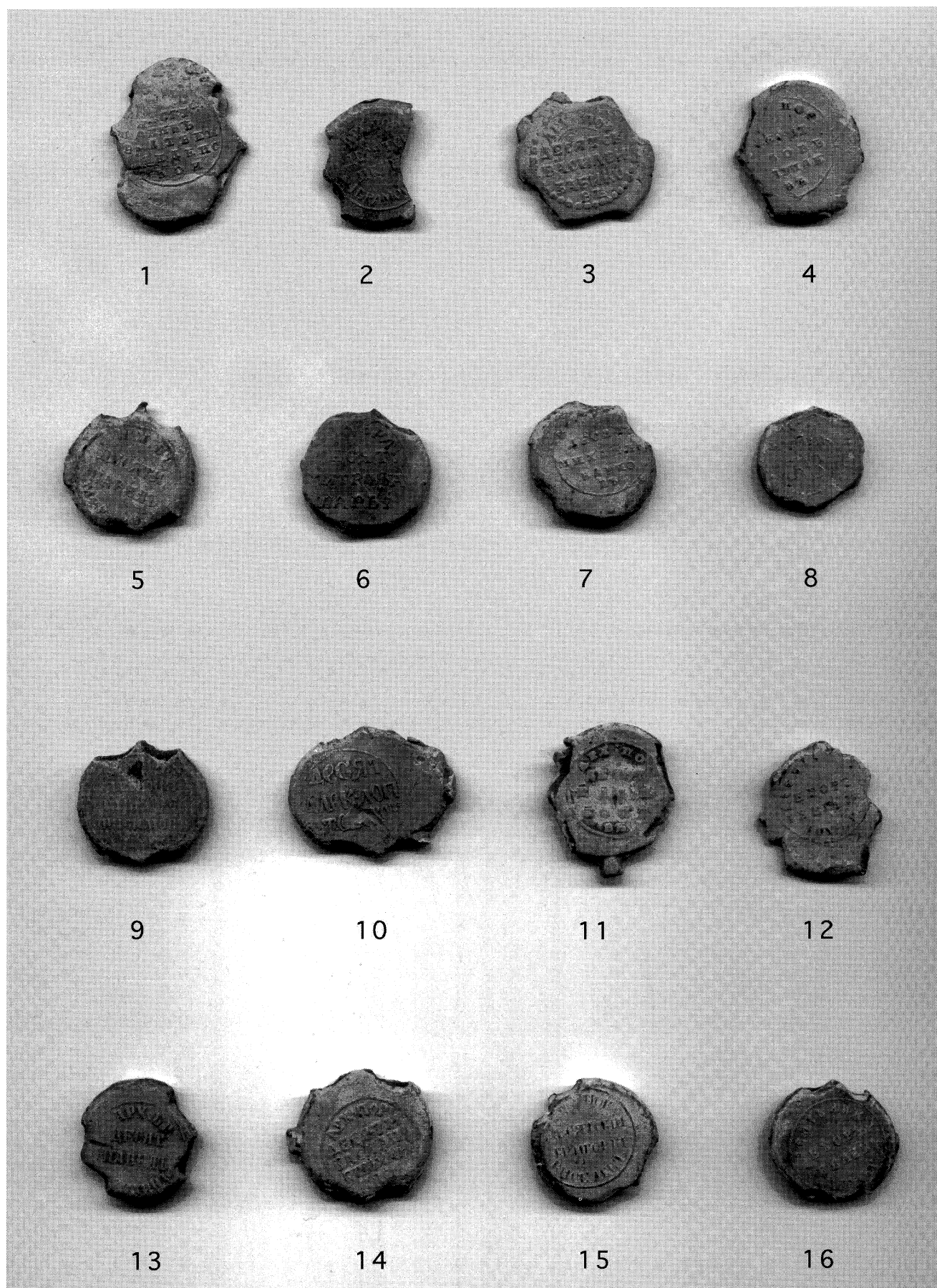
Flax seed should have been taken from the previous year's crop only, since older seed lost its germinating power. To prevent deception, the year of its growth was stamped on the barrel. In the case of the plant itself we have to assume that the date stamped clearly on the lead seal represented the year of export of goods which

in many cases would have been harvested the previous year since in some areas, especially around Archangel, the crop could not be harvested before mid-August and often had to be retted over the winter (Warden 1864, 10).

In England examples of eighteenth-century Russian seals have been identified in print in Bristol City Museum (duQuesne-Bird 1970, 226–7), the Salisbury and South Wiltshire Museum (duQuesne-Bird 1972, 276–77), the Ulster Museum (duQuesne-Bird 1972, 276–77) and the Ashmolean Museum, Oxford (MacGregor 1985, 156–57).

Twenty three seals have been discovered in North Yorkshire, around Pickering, Malton and Market Weighton, of which twelve date from the eighteenth century and eight from the nineteenth, one being illegible. They include two of the earliest known Russian lead seals discovered in Britain, and bear dates which cover the period from the 1740s to 1830. They had been attached to bales exported probably from St Petersburg or other Baltic ports, although only four bear the initials SPB, the Russian abbreviation of St Petersburg. There are no examples of seals indicating the contents of the bales such as are found on exports from the port of Archangel on the Northern Dvina, and which are found frequently in Scotland.

The museums of Scotland hold a substantial number of lead seals of Russian origin, some of which fulfilled different functions from those found on flax and hemp bales. Perth Museum and Art Gallery possesses three examples of Russian lead-alloy bale seals, with dates ranging from 1768 to 1862. Two originate in Archangel and one in St Petersburg. The McManus Galleries, Dundee have fourteen bale seals, one dating from the eighteenth century. Six of them are from St Petersburg and four from Archangel. Falkirk Museum possesses five seals, with dates between 1782 and 1791. The Signal Tower Museum at Arbroath has 23 Russian bale seals, ranging in date from 1797 to 1848, four of which are from Archangel and only two definitely from St Petersburg. Three are indeterminable, owing to extensive corrosion and damage, a problem which affects the decipherment of many of the seals in this collection. Montrose Museum has 24 Russian lead-alloy bale seals dating from between 1779 and 1887, six of them from Archangel and thirteen from St Petersburg. The National Museum of Scotland in Edinburgh has some sixteen Russian seals, with dates between 1774 and 1891, many of which were found in areas in Edinburgh, Musselborough and Peeblesshire, as well as in the North of Scotland. Two originate in Archangel, five in St Petersburg and the origin of seven others has yet to be determined. Two are too badly damaged for their



Illus 1–16 Archangel seals.

place of origin to be established. The Cromarty museum has a collection of 85 Russian seals, none of which is from Archangel. Sixty-two are definitely from St Petersburg and fifty-one date from the eighteenth-century, chiefly from the period 1775 to 1779, including some which differ in design from those discovered in Fife. They include a seal dated 1752 (accession number CRMCH: 1990.3.8).

Discoveries have been made in Fife from areas in the East Neuk, particularly around St Monans, Elie and Kilconquhar, around Cupar, near Ceres, Falkland and Auchtermuchty and along the Tay coast at Newburgh, Ballinbreich and Balmerino. Other finds have also been made near Dysart, Crail, St Andrews, Kinghorn and Dunfermline. Regrettably, the exact location of most of the discoveries has not been recorded. Approximate referencing is possible for some of the more recent finds, which were made mainly on agricultural land and less frequently around ancient monuments and in dock areas.

Types of Russian bale seal

Russian seals fall into three main groups. One group consists of seals originating in Archangel, and a second of those originating in St Petersburg and at the same time bearing the initials SPB (= St Petersburg). The third group, which for ease of reference we have designated Group C, comprises a significant number of seals on which the lettering provides no obvious clue to their place of origin. It is these Group C seals in the Fife collection that date from the earlier period (1780s–1830) and one has to consider whether some, if not all, might have originated in St Petersburg.

It has not hitherto proved possible to identify the exact significance of some of the letters and numbers which occur regularly on some of the Russian seals, especially those in Group C. It is most probable that where we find two or exceptionally three letters without accompanying numbers on the date side of Archangel and St Petersburg seals such letters are the initials of the owners or producers of the goods being exported, whilst the surnames which appear in full on the undated side of all the seals are those of Quality Control Officers (brackers/selectors). For ease of further reference we shall treat the dated side as the reverse and the undated side as the obverse.

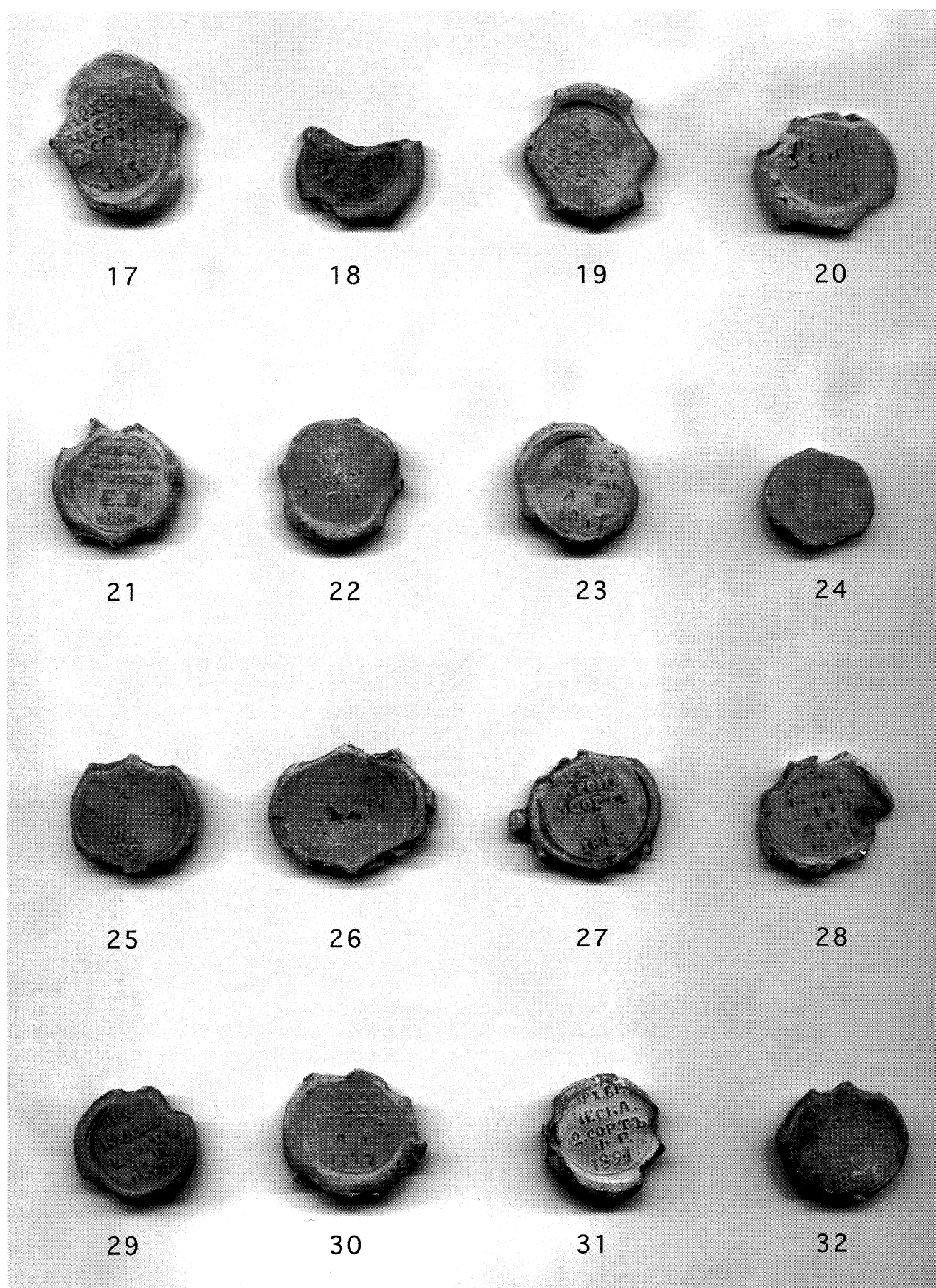
So extensive was corruption and bribery in Russian commerce at the beginning of the eighteenth century that a system of Quality Control, known in Russian as *brak* (English = brack) was introduced by Peter the Great in 1712 in order to determine the quality and correct sorting of certain goods offered for export, the aim being to guarantee the interests of the traders, both sellers and buyers, by official certification of the quality of the goods on sale. In 1721 customs regulations were also tightened and more strictly observed (Ogorodnikov 1890, 170–71). Whilst in other countries, such as North Germany brack had been used to regulate cattle, in Russia it was made obligatory in the export and import

of such wares as flax, hemp, tow, timber, herrings etc. The position of the ‘bracker’, Russian *brakovshchik* (a person with overall responsibility for the conduct of *brak*), was established. In order to carry out the actual inspection a *desiatnik* was used, a man selected by the brackers themselves and who, under oath, worked under their direct supervision. In order to supervise the proper control of goods at St Petersburg and Archangel further special committees were established and severe penalties imposed for improper conduct. Writing in the middle of the nineteenth century, McCulloch described the process as follows. ‘When flax is brought to the principal Russian ports whence it is shipped, it is classified according to its qualities and made up into bundles by sworn inspectors (brackers) appointed by Government for the assortment of that and all other merchandise. These functionaries are said to perform their tasks with laudable impartiality and exactness.... Good flax should be of a fine bright colour, well separated from the tow, codilla, or coarser portion of the plant, and of a long, fine, and strong fibre.’ (McCulloch 1869, 614).

Archangel seals

Archangel seals are larger than their St Petersburg counterparts (typically about 28mm x 27mm, though some are as large as 36mm x 28mm) and carry more readily decipherable information. In addition to indicating the place of export (Archangel Port) or the passing of quality control (Archangel *brak*) Archangel seals most often also reveal the sometimes abbreviated name and rank of the Quality Control Officer (*desiatnik*), the contents of the bale to which they were attached, the quality or grade of the goods to be exported, the initials of the owner or producer and the date when the seal was stamped.

The names of several different Quality Control Officers are recorded on the seals from Archangel immediately beneath the word *desiatnik* which appears variously as десятникъ, десяцкой, десяцко, десятской, десятс, десятск, десяск and десят. There are several reasons for regarding the position of *desiatnik* as that of a Quality Control Officer rather than a Customs Officer. First, the requirement by Russian law that all Russian Customs seals carried the State Arms (Petrov 1988, 295), and the fact that none of the seals in any of the Scottish collections examined bears coats of arms argues strongly against the view that these names are those of Customs Officers, or of other Officers performing Customs duties. Secondly, the fact that goods from the ports of Archangel and St Petersburg are ones to which seals were attached, supports the view that the name of the individuals stamped on the obverse of many of the seals are the names of Quality Control Officers rather than Customs Officers, a view further supported by the recording on most of the Archangel seals of the process of Quality Control which from the 1830s to 1900s is indicated by the form Brak (Brak), or its abbreviated forms Bra. (Bra.) or Br.



Illus 17–32 Archangel seals.

(Br.). The *desiatnik* was the lowest ranking individual empowered to supervise checking the quality of and grading the goods about to be shipped from Russia.

Contents of bales sealed in Archangel

On Archangel seals the contents of the bales are described in the following ways:

ЛЕНЪ	flax
ЛНА БРАК	graded flax
ЛНЯН БРАК	graded flax
КУДЕЛ (КУДЕЛЯ or КУДЪЛЯ)	tow: the shorter fibres of flax or hemp which were separated by heckling from the fine and long flax (called 'line'). Note: 'to heckle' was to dress flax by separating it into its finest fibres
ПАКЛЯ	codilla: broken flax, the coarse part of the flax separated in the first heckling process
ЧЕСКА	heckled flax (hesanyj len = 'long line' i.e. long flax)
КРОНЪ	high-quality flax; crown
ПАКЛЯЧЕСКА	heckled codilla
ЗАБРАКЪ	lowest quality flax, zabrak, zabrack, zebrack

Of the 75 seals which can be definitely identified as originating at the port of Archangel, only 12 make direct reference to flax. On no seal is direct reference made to hemp, but, as in English, the Russian forms for tow and codilla are not specific to flax or hemp, indicating rather a stage in the processing of the fibre rather than whether the fibre is flax or hemp. Archangel had surrendered its position as exporter of hemp by the 1860s to St Petersburg and Riga (Warden 1864, 325). McCulloch reports that in the mid-nineteenth century every bundle had fixed to it a piece of lead, stamped on one side with the name of the selector, and on the other with the sort of hemp and the time it was selected (McCulloch 1869, 696).

Twenty seals describe the bale contents as tow, six as codilla and six as heckled codilla. Thirteen are described as heckled flax. Seven seals are marked as high-quality (crown) flax (= German Kron). The exact significance of the word *kron* is not clear since in addition to indicating high-quality flax, one important Russian lexicographic source (Dal' 1912, II, 507) also describes it as long-fibre second quality flax, though this last definition is given without illustration.

Eleven seals indicate that the contents were the lowest quality flax, zabrak. Until 1862 there were only

four grades of flax in Archangel: 1st CR. (= crown), 2nd CR., 3rd CR., 4th CR., probably corresponding to the Russian marks found on Archangel seals: 1 сортъ, 2 сортъ, 3 сортъ, 4 сортъ (1st sort etc.). According to Warden, a new system was introduced which added Zabrack 1 and Zabrack 2, i.e. забракъ 1 сортъ (zabrack 1st sort), or alternatively забракъ 1 руки (zabrack 1 ruki) and zabrak= 2 sort= (zabrack 2nd sort) or забракъ 2 руки (zabrack 2 ruki) to denote grades lower than 4th Crown for bundles containing flax which was either too short or which contained too much tow to be cleaned with the other qualities (Carter 1919, 13; Warden 1864, 323). However, evidence provided by the seals under study show that the term Zabrack No 1 was used at least as early as 1847. The terms most frequently used in English for grading flax and its by-products are: 12-head, 9-head and 6-head (Warden 1864, 109). Codilla was classed by brackers into 1st, 2nd and 3rd grades, tow into Nos 1 and 2 qualities (Warden, 323–24), and the seals in the collection under review support Warden's statement.

Archangel Quality Control Officers

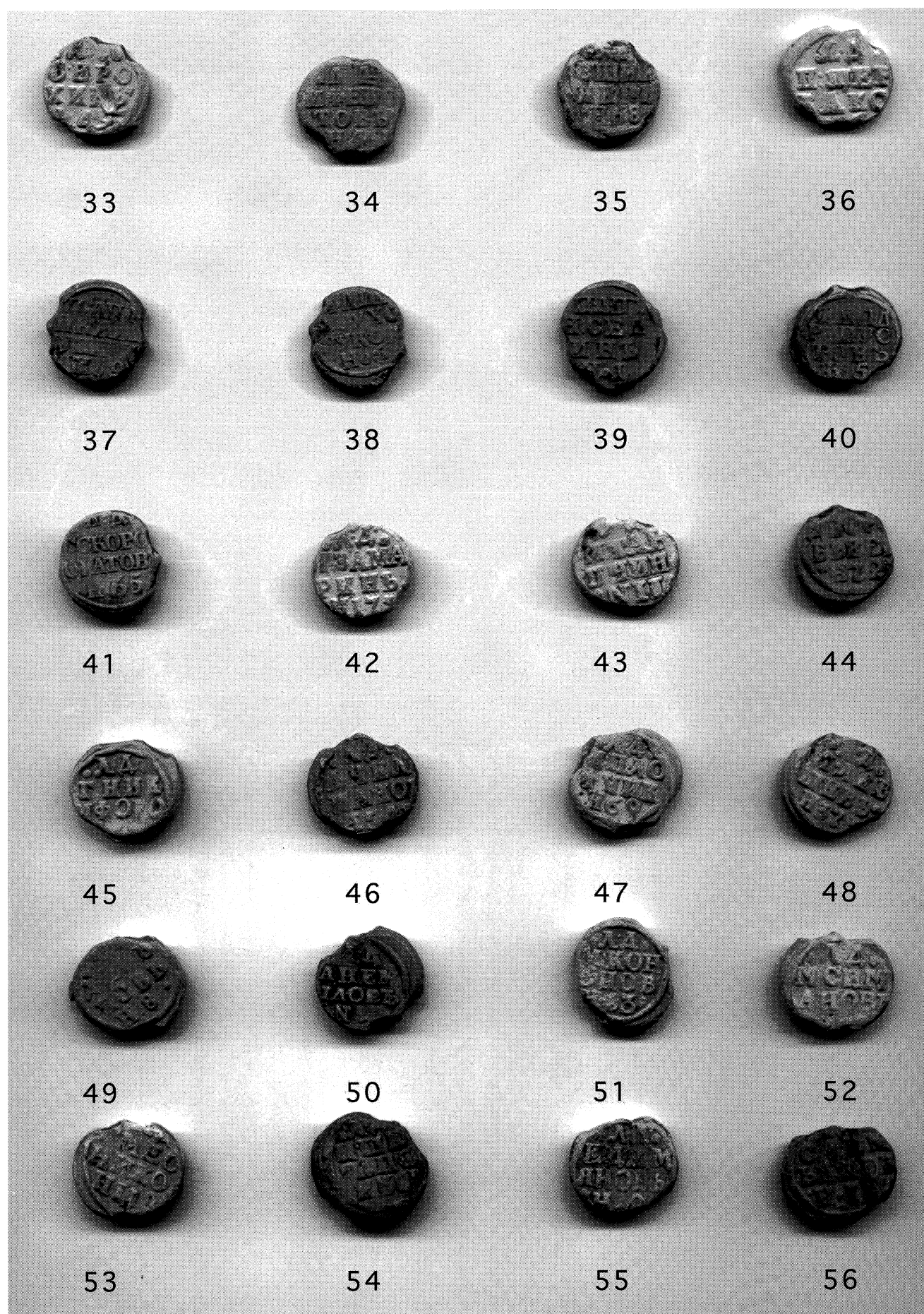
Twenty three different names of Quality Control Officers from Archangel can be reliably deciphered on the seals, amongst which the most common are Egor Tevlev (six seals, dated between 1864 and 1890s) and Matvei Vedenskoi (3 seals, dated 1847–1851; see Illus 1 & 17). Most of the others occur as isolated examples, and none of them occurs among surnames of merchants attested in late seventeenth-century and eighteenth-century sources from the Archangel region (Kola 1930; Ogorodnikov 1875; Ogorodnikov 1890). On a further 52 seals the names either cannot be deciphered at all or that part which is legible is open to more than one interpretation. For example, in addition to Ivan Bulychev's name on CUPMS: 1999.53.9, dated 1874, it is tempting to interpret the same name on CUPMS: 1999.53.3, dated 1880, but the inscription in parts is insufficiently clear to be absolutely certain.

Order of presentation of information on Archangel seals

Typically, on seals dating from the late 1830s onwards the obverse gives the place of bracking in the first line, followed by the initial and name of the bracker on the second and third lines. The final line contains a combination of letters and numbers which might represent the location at which the Officer worked or the registered number of the sealing irons he was entrusted with. The reverse side of these seals usually indicates, in order, the place and process of bracking, the contents of the bale, their quality, the initials of the producer and finally the date.

Initials of producers

Eleven sets of initials of producers are found, all in Cyrillic, the most frequent being АИГ (AIG), ГБ (GB)



Illus 33–56 33–44 St Petersburg seals. 45–56 Seals of uncertain origin.

and MC (MS). Only two sets of initials coincide with those found on St Petersburg seals EP (EP), MC (MS). Further investigation of Russian archival sources, such as the *revizionnye knigi*, a type of Russian census which operated from 1718 to 1857, when they were replaced by the next full census in 1897 (Kabuzan 1963, 5), will be necessary to establish whether the sets of initials refer to the same persons.

Early Archangel seals

Fourteen Archangel seals in the Fife Council Museums (*East*) collection dating from the early 1830s differ in their configuration from those described above (CUPMS: 1999.52.13, 15, 16, 17, 18, 21, 23; 1999.53.11; 1999.54.30, 31, 57; 1999.55.5; 1999.56.1; 1999.58.1), of which eight are clearly dated between 1832 and 1838. Dates on the other seals are illegible.

Typically, the first line on the obverse of these seals has the initials A.П. (A. P = Archangel Port). Nine of the seals have the same abbreviation of the rank of Quality Control Officer *desiatsko* which follows on the second line. One seal has *desiatskoi*, one *desiats* and a third *desiask*. Three are illegible. The seals are also unusual in providing the bracker's initials rather than his full name.

The seals show greater variety in the way they present information on their reverse sides. They all indicate the contents of the bale to which they were attached, followed by its quality, the initials of the producer and the date. On six seals showing МП (MP) as the initials of the producer the initials are spanned by the date, for example, CUPMS: 1999.52.18 has 18МП38 (18MP38, i.e. MP 1838). On seal CUPMS: 1999.56.1, the date spans the initials which are К [Д] (K [D]). On two seals the initials of the producer are not spanned by the date, but by the quality indicators. The digits precede the initials В Д (V D) and А Р (A R) and the abbreviation of the word *ruka* (as *r* or *ru*) (= quality) follows them: CUPMS: 1999.52.13 (2 ВД р) (2VD r, i.e. VD 2nd quality) and CUPMS: 1999.52.15 (2 АР ру) (2 AR ru, i.e. AR 2nd quality). A feature of early Archangel seals is also this use of *pyka* (*ruka* = hand, sort) to indicate quality. Only one early seal in the Fife (*East*) collection has *c* for сорт (*s* (i.e. sort)), CUPMS: 1999.52.17, which becomes characteristic of all later seals from Archangel.

The nouns indicating the contents of some of the bales are also spanned by the quality indicators, supplementing the information that the process of Quality Control has been completed. For example, on CUPMS: 1999.52.16, in addition to the indication of the quality control (лнян. бра[к]. = graded flax), the contents are further specified as codilla, spanned by symbols indicating its quality: 3. пак. р (3 codilla [class], i.e. 3rd class codilla).

The letters and digits on this group of seals are typically given in italic form, but on three seals—CUPMS: 1999.52.15 (1837), CUPMS: 1999.56.1 (no date) and CUPMS: 1999.58.1 (no date)—they are

stamped in plain font. Seal CUPMS: 1999.52.18, stamped in italics and dated 1838 (see Illus 10 and 26), set alongside a seal stamped in plain and dated 1837, suggests that at the end of the 1830s the style of presentation of information in Archangel changed, but for a short time the two styles ran concurrently. By the middle of the 1840s plain letters and digits had become firmly established, with the exception of seals bearing the initials В ЛЕД (V. LED). The letters and digits on eight seals bearing the initial V and the abbreviated surname LED are stamped in plain with the exception of the producer's name/initials which are still given in italics: CUPMS: 1998.983 (1864); CUPMS: 1999.52.1 (1851) (see Illus 1 and 17); CUPMS: 1999.52.14 (1857) (see Illus 4 and 20); CUPMS: 1999.54.11 (1862); CUPMS: 1999.54.14 (1859); CUPMS: 1999.55.2 (1848); CUPMS: 1999.55.3 (1838); CUPMS: 1999.56.2 (1847).

Use of the form *ruka* rather than *sort* to indicate quality is also found on two later seals which denote the contents as *zabrak*: CUPMS: 1999.52.2 (1884)—забракъ 2и руки (*zabrak 2i ruki* = *Zabrack No 2*), CUPMS: 1999.53.2 (1877)—забракъ 1и руки (*zabrak 1i ruki* = *Zabrack No 1*). None of the other eight seals indicating *zabrak* which range in date from 1847 to 1874 carry any indication of quality.

St Petersburg seals

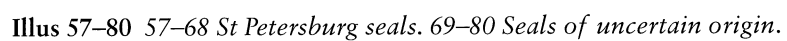
In the Fife collection St Petersburg seals are typically between 19mm x 21mm or 23mm. x 22mm. The significance of some of the letters and digits on them is less obvious.

St Petersburg Quality Control Officers

The names of thirty eight Quality Control Officers from St Petersburg whose bale seals bear the Russian abbreviated form of St Petersburg SPB/СПБ, sometimes in Cyrillic and sometimes in Roman letters, occur on many of the seals on the obverse in the corresponding position to those from Archangel but without the designation *desiatnik*. Amongst the names the most frequent are S. Filatov (3 seals, dated 1831–1838), M and P Kaltushkin (7 seals, dated 1831–1839), Shcherbakov (3 seals, all 1831) and Z Temkin (2 seals, 1831). Other names are largely illegible or open to more than one interpretation. None of these family names occur among those of merchants attested in eighteenth-century and nineteenth-century sources from the St Petersburg region (Demkin 1998, 211–48).

Order of presentation of information on St Petersburg seals

The obverse has on its first line the initial L. D. (Л. Д.), followed on the next two lines by the initial and surname of the Quality Control Officer. The fourth line contains a combination of letters, usually Н (N) or Но (No) and numbers which might represent the location at which the Officer worked or the registered



number of the sealing tongs he used. The reverse of seals carries on the first line the initials СПБ or SPB and on the second either two or three initials which denote the producer of the goods. The date is given last.

Initials of producers

On St Petersburg seals twenty-one sets of initials can be identified among the collection in Fife Museum Services (*East*), some of which are in Roman letters, but most in Cyrillic. Two sets of initials coincide with those found on Archangel seals (ЕП (=EP), МС (=MS)).

Other notations

On the reverse side of many St Petersburg seals dating from the 1830s, initials of the type I.C.B.N 2, N P -2, N P -3, C H 12, T H 12, T12 H appear, which resemble those found on Group C seals. It has been suggested that the markings may represent the location at which the Quality Control Officer worked or were the quality control registration number of that batch of goods. duQuesne-Bird, following W. Seaby, suggests that the numbers might indicate the amount of tax levied (duQuesne-Bird, 1972, 277) but this seems unlikely. Neither in 1766 nor in the mid-nineteenth century did the export duty rates levied on flax bear any relation to the numbers encountered on the seals from St Petersburg (Tariff, 1767, 26), where they are mainly 2, 3, 9 and 12. They seem more likely to represent a codified indication of quality or contents. The numbers 9 and 12 which are more frequent refer in all probability to 9-head and 12-head (see Appendix G(ii) and McCulloch 1869, 614). Owing to the constraints of space, further decipherment of such letters and numbers must remain a task for the future.

Sixteen St Petersburg seals have no initials on the third line of the reverse side to indicate the producer, but in the first line of their obverse share the initials ПЛПД (PLPD) instead of the usual ЛД (LD): (CUPMS: 1999.52.31 (1836), 1999.52.32 (1833), 1999.52.33 (1832), 1999.52.34 (1841), 1999.52.35 (1839), 1999.53.17 (1833), 1999.53.18 (1837), 1999.53.19 (1833), 1999.53.20 (19thc), 1999.53.22 (19thc), 1999.54.32 (1830s), 1999.54.34 (1831), 1999.54.37 (19thc), 1999.56.8 (1830s), 1999.56.9 (1831), 1999.57.6 (1831), 1999.57.9 (19thc). No seals are found where the initials PLPD are accompanied on the reverse by the producer's initials, and they all seem to date from the 1830s and early 1840s. Seven of them give the Quality Control Officer's surname as Kaltushkin and all but two are accompanied on their reverse by the letters and numbers I C B N 2. It has not proved possible with any degree of certainty to match these combinations of letter and numbers with those indicating the quality and types of flax listed in the works of Warden, Carter and McCulloch (Warden 1864, 333; Carter 1919, 12-16; McCulloch 1869, 614 and 696).

One seal—CUPMS: 1999.55.27—is odd in its configuration in that it has different surnames on its obverse and reverse, but no date. The names are: (obverse) Poganin: (ПОГ(а)НКИ, (-)), (reverse) Balovanov, P.: (БАЛОВАНОВ, П).

The abolition of the compulsory system of Quality Control of hemp, flax and tow in the port of St Petersburg in January 1860, in part because it was already breaking down, is also reflected in the scarcity of seals from St Petersburg after 1840. The reduction in the quality of flax at St Petersburg which Warden comments on led to buyers losing confidence in the brack system and this resulted in foreign merchants seeking sources elsewhere (Warden 1864, 326). The amount of flax exported to Britain in 1838 was 14,299 tons and of hemp 35,587 tons. By 1841 these had fallen to 7,505 and 22,781 tons, respectively. Brack continued to be strictly observed in Archangel and Riga, and the quality and quantity of goods exported from these ports reflected this (Warden 1864, 327). However, this in itself is not sufficient to explain the decline in the use of seals from as early as the 1840s, since there were years, such as 1848, 1849 and 1850 when exports seem to hold up. One problem was undoubtedly the economic crises which Britain experienced in 1841, which resulted in a general cessation of trade and 1847 when international trade in general suffered. A further reason for continuing decline was the deterioration in Anglo-Russian relations during 1853 which culminated in the outbreak of war in the Crimea in 1854 and rendered the port of St Petersburg unavailable to British mercantile shipping. After the war, between the years 1856 and 1866 trade from Russia continued to decline and no longer did Britain import almost all its supply of flax, hemp and tallow from Russia, evidence of which is further provided by the dates on the seals discovered (see Table 1).

Seals of unknown origin

Fife Museum Services (*East*) has eighty-seven seals on which Cyrillic letters appear, but which do not carry the initials SPB/СПБ, though in many respects, such as dimensions and the style of the letters and numbers, they resemble St Petersburg seals. They are mainly of an earlier date than the Archangel and St Petersburg seals described above, but no examples are found after the beginning of the 1830s. None of the seals in this group has on their reverse side initials which could be interpreted as those of the producers of the goods being exported, and are of the AK 12 H, AP 12 K, PF 12 type. Some of these might refer to the quality of the goods baled, though it has not proved possible to match them accurately with abbreviations listed in Warden, Carter and McCulloch, with the possible exception of P K (Picked Crown) which Warden cited in 1864 as the recently introduced name of Crown flax from Riga (Warden 1864, 333).

Table 1

	decade total	1 Archangel Port	2 St Petersburg	3 unknown origin	4 origin indeterminable
1780–1789	2	0	0	2	0
1790–1799	8	0	0	8	0
18th century	(2)	0	0	2	0
1800–1809	17	0	0	17	0
1810–1819	2	0	0	2	0
1820–1829	43	0	2	41	0
1830–1839	57	9	46	1	1
1840–1849	11	9	2	0	0
1850–1859	8	8	0	0	0
1860–1869	9	9	0	0	0
1870–1879	14	14	0	0	0
1880–1889	5	5	0	0	0
1890–1899	10	10	0	0	0
19th century	(22)	6	9	7	0
1900–1909	1	1	0	0	0
indeterminable	(22)	4	7	7	4
total	233	75	66	87	5

Names of Quality Control Officers on Group C seals

Forty-eight different surnames encountered on Group C seals can be listed, but on a further 40 seals of this type the names are not clearly discernible. The most frequently encountered names are Siniakov (3 seals, dated in the 1820s), Shyrovskoi (3 seals, dated in the 1820s) and Plotnik (3 seals, dated 1790s and 1800s), but there is little, if no overlap of names on these and the St Petersburg seals. Only one name—Demianov—also occurs in the list of surnames found on St Petersburg seals, separated by a period of some twelve years, i.e. 1818 and 1830. It is clear that this is the group on which most research is still needed.

Order of presentation of information

In the first line of the obverse the initials L. D. (Л. Д.) occur, followed in the second and third lines by the initial and surname of the Quality Control Officer. The fourth line contains a combination of letters, usually H (N) or Ho (No) and numbers which might represent the location at which the Officer worked or the registered number of the sealing tongs he used. The reverse of seals carries on the first line the initials N. P., always in Roman letters, and on the second line initials of the type I.C.B.N 2, N P -2, N P -3, C H 12, T H 12, T12 H., which resemble those found on a few of the St Petersburg seals. The date is given last.

Dates of Russian seals

Problems surround the dating of as many as 115 seals. On nineteen Fife seals no date is visible. On others it is chiefly the absence or illegibility of the decade digit which creates the greatest difficulties. There are thirty-one such seals. By contrast, in those instances where the

decade digit is present, but other digits absent it is often possible to arrive at a date which is in some cases approximate (1830s), but in others quite accurate (18[-]5 = 1835).

St Petersburg seals in the Fife collection date from the 1830s until the 1840s. However, the dates of two St Petersburg seals cannot be clearly identified and might date from before 1830. When we look at other Scottish collections we find evidence that the earliest St Petersburg seals with the initials SPB antedate the seals in the Fife collection by some fifty years, for example there are three seals in the Cromarty collection which date from the eighteenth century (accession number CRMCH: 1990.3.6 (1798), CRMCH: 1990.3.12 (1776), CRMCH: 1990.3.23 (1775).

The distribution of seals by decade, starting in the eighteenth century, is represented below in tabular form. The numbers given in lines 3 and 14 (i.e. 18th and 19th centuries) include those seals on which the decade digit is illegible, or so damaged as to render it impossible to ascribe them to a particular decade. The column headed 'Origin Indeterminable' lists the number of seals on which insufficient lettering and numbering is legible to make it possible to allocate them to any of the other groups, even in the broadest terms.

It is immediately apparent that the three different styles of seal fall into quite distinct periods, with those in Column 3, of unknown origin, forming the earliest group. In the Fife collection they date from the 1780s to the early 1830s, whilst those from St Petersburg are found between the 1830s and 1840s, most commonly in the 1830s. One must therefore consider whether the seals of unknown origin represent an earlier form of St Petersburg seals on which the initials SPB were not stamped, rather than seeking their origin elsewhere. As stated above, that task must be set aside for future research. The Archangel seals also cover a definite,

albeit rather longer period from the 1830s to the turn of the century, with an increase about the 1870s. When the decade totals are compared they show considerable economic activity in the 1820s and 1830s, following the Napoleonic wars. Then followed a sharp decline in St Petersburg beginning in the 1840s, though trade through the port of Archangel continued up to 1851, picking up again in 1857, after the signing of the peace treaty in Paris brought an end to the war in the Crimea in 1856. A detailed analysis of the 8 Archangel seals dating from the 1850s show three from 1851, three from 1857 and two from 1859. Trade through this port reached its height in the 1870s and 1890s.

Russian sources themselves are almost silent on these artefacts, some major archaeological centres such as the State Historical Museum in Moscow denying knowledge of them, others acknowledging that they have no expertise in this field. There is a collection of lead seals in The Hermitage in St Petersburg (duQuesne-Bird 1972, 277; Macgregor 1985, 157) but, according to Sotnikova in a personal communication to the present author, in the collection of 230 Russian lead seals which were bequeathed to the museum in 1965 there are no examples of the sorts of seals discovered in Britain. One further report speaks of Customs and Railway seals in the museum at Pskov in North West Russia but these too differ in style from those seals discovered in Britain (Ogneva 1993, 16–18).

Many seals of Baltic origin are erroneously listed in Museum collections as Russian, and some Russian seals are incorrectly described as flax/hemp bale seals when they are more likely to have different functions. As more attention is paid to the discovery of such seals and their existence is reported to the main archaeological centres of Britain and Russia it should prove possible to decipher those combinations of initials and numbers which are at present incomprehensible, helping to determine whether they are of St Petersburg provenance or whether some or all of them originated in Baltic ports, such as Narva and Riga, which formed part of the Russian Empire in the eighteenth and nineteenth centuries.

Conclusion

The present article introduces to the study of Russian-Scottish commercial relations an unusual 18th- and 19th-century source—lead quality-control seals. Although similar seals have been studied with reference to ancient and mediaeval history, for modern times they have been largely ignored. However, they serve as a valuable source since they possess in such a compressed form exceptionally diverse information. They are useful in studying two problems connected with internal and external trade, the geographical distribution of the Russian ports used for the export of flax and hemp to Scotland and the distribution throughout Scotland itself of the goods imported. Furthermore, they allow comparisons to be made over different periods of time.

The seals had to conform to certain different criteria, having on the one hand to correspond to the technical standards of the day and on the other being required to differ in text, since it was their very function to distinguish goods, their quality and the place from which they were transported across national boundaries. The Scottish seals in the Fife collection subdivide into three groups on the basis of their place of origin and overlap only partially in the period of their existence from the 1780s to the early 1900s. Their distribution clearly reflects the political and economic events of the nineteenth century, with few examples from the period of the Napoleonic wars and none from the period of the Crimean War.

Examination of the seals also enables us to judge the intensity of contacts between Russian and Scottish ports, but unfortunately, Russian archival and archaeological material which might help us shed light on some of the difficult questions surrounding the origin of the seals and the significance of some of the imprint remains to be examined.

Conventions used in descriptions

- i* Letters and numbers in square brackets indicate that there can be some doubt about their transcription but that the most likely interpretation is the one given.
- ii* A letter or number enclosed within square brackets denotes that it is absent from an abbreviated form on the seal and has been added.
- iii* A hyphen enclosed within square brackets shows the presence of an illegible letter.
- iv* An unbracketed hyphen indicates that a clear space is visible on the seal but that there is no possibility of identifying whether a letter or number actually existed in this position.
- v* The symbol / indicates the end of a line on the seal.
- vi* Words enclosed in brace brackets { } are the author's comments or observations.

Cyrillic letters found on Russian lead seals

<i>Cyrillic</i>	<i>approx English equivalent</i>	<i>Cyrillic</i>	<i>approx English equivalent</i>
А	a	Р	r
Б	b	С	s
В	v	Т	t
Г	g	У	u
Д	d	Ф	f
Е	ye	Х	kh (Scottish loch)
Ж	zh (French j)	Ц	ts
З	z	Ч	ch
И	i	Ш	sh
Й	y	Ю	shch
К	k	+	no sound
Л	l	Ы	i
М	m	Ь	(softens preceding consonant)
Н	n	Ѣ	ye
О	o	Э	e
П	p	Ю	yu
		Я	ya

Glossary of Russian words in Cyrillic and Roman type

бра́к, БРА́К, Бр., Бра.	brack, quality control
brakovshchik	bracker, Quality Control Officer
brakovshchiki	brackers, Quality Control Officers
деся́тникъ, деся́тской,	desiatnik (also appears as
деся́тко, деся́тской,	desiatskoi and abbreviated
деся́тс, деся́тск, деся́ск,	forms); the lowest ranking
деся́т.	official charged with
	supervising quality control of
	exported goods
рука, ру., р.	grade, class
сорт, с.	sort, kind, grade
забра́к, zabrák, zebrák	lowest quality flax

A complete catalogue of the Russian flax/hemp lead-alloy seal holdings of Fife Museum Services (*East*) has been deposited in St Andrews Museum and at the Fife Museum Services (*East*) offices in Cupar, Fife. Lists are also available containing the surnames and initials of the Quality Control Officers (brackers), the initials of different producers and the letters and numbers on the reverse of the seals. A detailed list of the dates of seals is also available.

Illustrations pp. 212, 214, 216 and 218

Forty examples of seals from the Fife Museum Services (*East*) collection are illustrated, showing the obverse and reverse sides of sixteen Archangel seals, twelve seals from St Petersburg and twelve Russian seals of uncertain origin. None of the seals illustrated has any clear provenance, and all are housed in the Fife Museum Services (*East*) collection in Cupar, Fife.

All the seals are bifacial. The overall dimensions are given in each case.

Seals originating in Archangel**1 CUPMS: 1999.52.1** (See Illus 1 and 17).

Maximum diameter 36 mm x 29 mm.

Obv о—СЯТ=НИКЪ/ В. [М]АТВЕЙ/ВЕДЕНС/КОИ

Rev АРХ. Б—/ ЧЕСКА/ 2: СОРТ/В. ЛЕЮД][Ъ]/ 1851

The obverse shows the rank ([de]siatnik) and name of the Quality Control Officer, Matvei Vedenskoi. The reverse carries the Archangel abbreviation АРХ., the quality control or inspection abbreviation Б[РАКЪ], the contents of the bale HESKA(heckled flax) and an indication of its quality 2:СОРТ (2nd sort / 9-head). Then follow the initial and abbreviated name of the producer В. ЛЕД (V. Led) in italic which is unusual. (See Illus 20 and 26). On the final line the seal is dated 1851.

2 CUPMS: 1999.52.3 (See Illus 2 and 18).

Maximum diameter 27 mm x 19 mm.

Obv АРХ ПОР/ДЕСЯТСК[—]/ПЕТР/АБРАМОВ[Ъ]

Rev —/ КУД[ЕЛЬШ= 2Ъ СОРТЪ/Ф. Р./ 1872

The obverse shows the port of origin АРХ. ПОР, the rank (desiatsk[oi]) and name of the Quality Control Officer, Petr Abramov. The reverse indicates the contents of the bale (КУДЕЛЬ (tow), its quality 2ЪСОРТЪ (2nd sort / 9-head), the

initials of the producer Ф.Р. (F.R.), which are also found on fourteen other seals (see also Illus 29 and 31). The seal is dated 1872.

3 CUPMS: 1999.52.10 (See Illus 3 and 19).

Maximum diameter 29 mm x 30 mm.

Obv АРХ. -/ДЕСЯТСК=ВАСИЛЕИ/БАБИКО/ВЪ

Rev АРХ. БР/ ЧЕСКА/ 2 СОРТЪ/М. К.= 1851

The obverse shows the port of origin АРХ., the rank (desiatsk[oi]) and name of the Quality Control Officer, Vasilei Babikov. The reverse carries the Archangel abbreviation АРХ, the Quality Control Officer's symbol Бр. (Br[ak]). The contents of the bale are indicated as ЧЕСКА (heckled flax), and its quality 2 СОРТЪ (2nd sort / 9-head). The initials of the producer М.К. (M.K.), and the date 1851 follow.

4 CUPMS: 1999.52.14 (See Illus 4 and 20).

Maximum diameter 27 mm x 31 mm.

Obv - ПОР/[Д]ЕСЯТ/[Я]КОВЪ/ ДУПАЕ/ВЪ

Rev - - / ЧЕСКА/ 3 СОРТЪ/В. ЛЕД./ 1857

The obverse shows the place of issue as the port (of Archangel) ПОР. (=Port), the rank ([d]esiat) and name of the Quality Control Officer, Iakov Dupaev. The reverse carries indicates the contents of the bale as ЧЕСКА (heckled flax), and its quality 3 СОРТ: (3rd sort / 6-head). The initials of the producer are ВЪ ЛЕД (V: Led) in italics, initials found on seven other seals (see also Illus 17 and 26). The seal is dated 1857.

5 CUPMS: 1999.53.7 (See Illus 5 and 21).

Maximum diameter 29 mm x 28 mm.

Obv АРХ. БР/ДЕСЯТН./ПАВЕЛЪ/ МУР[-][Ъ]

Rev АРХ. БР. / ЗАБРАКЪ/ 2й РУКИ / Е. П./1880

The obverse shows the port of origin АРХ. (Archangel) and the quality control symbol Бр. (Br[ak]), the rank (desiatn[ik]) and part of the name of the Quality Control Officer, Pavel Mur[-][Ъ]. The reverse also carries the Archangel abbreviation АРХ and the Quality Control Officer's symbol Br. (Br[ak]). The contents are indicated as ЗАБРАКЪ (low-quality flax) of second quality, indicated by 2 руки ((2 ruki) (=2nd sort / 9-head). The initials of the producer Е.П. (E.P.), are also found on thirteen other Fife seals (see Illus 27). The seal is dated 1880.

6 CUPMS: 1999.53.13 (See Illus 6 and 22).

Maximum diameter 27 mm x 28 mm.

Obv АРХ. БРА./ДЕСЯТЪ/МИТРОФА/ШАРЫ

Rev А[РХ]. ПОР./ ЛЕНЪ/ЗАБРАКЪ/Я. К./ 1863

The obverse shows the port of origin АРХ. (= Archangel), the rank (desiat[nik]) and name of the Quality Control Officer, Mitrofan Shary. On this seal it is the reverse which carries the Archangel Port abbreviation АРХ. ПОР. (= Archangel Port). The contents of the bale are clearly indicated as low-grade flax, i.e. ЛЕН (flax) and ЗАБРАКЪ (= zabraк). The initials of the producer Я.К. (Ja.K.), are also found on six other Fife seals (see Illus 32). The seal is dated 1863.

7 CUPMS: 1999.53.15 (See Illus 7 and 23).

Maximum diameter 27 mm x 27 mm.

Obv А [Р] [-]. -/ДЕСЯТ/МИХАИЛ[О]/КАРПО/ВЪ

Rev АРХ. БР/ ЗАБРАКЪ/ А. Р./ 1847

On the obverse only the letter A is clearly visible to indicate the port of origin but the rank (*desiat[nik]*) and name of the Quality Control Officer, Mikhailo Karpov. The reverse carries the Archangel quality control abbreviation АРХ. Бр. (Archangel Br[ak]). The contents of the bale are indicated as ЗАБРАКЪ (low-quality flax). The initials of the producer А.Р. (A.R.), are found on four other Fife seals (see also Illus 30). The seal is dated 1847.

8 CUPMS: 1999.52.16 (See Illus 8 and 24).

Maximum diameter 22 mm x 24 mm.

Obv [А] П. /ДЕСЯЦКО/ К. З.

Rev А. П / ЛНЯН БРА[К]/ 2 СОРТЬ/18 МП35/ 3. пак.р

The obverse carries the initials [А] П. (= Archangel Port), the rank of the Quality Control Officer (*desiatsko[i]*) and his initials, К. З. (K. Z.). The reverse carries the same Archangel abbreviation А П (=A. P). The contents of the bale are indicated as ЛНЯН БРА[К] (= graded flax), and its quality 2 СОРТЬ (2nd sort / 9-head). The initials of the producer М.П. (M.P.), found on four other Fife seal (See Appendix G) are surrounded by the date 1835. The quality of the contents of the bale are given in the final line as 3. пак. р (3 руки пакля = 3 grade 6-head codilla).

9 CUPMS: 1999.57.3 (See Illus 9 and 25).

Maximum diameter 26 mm x 28 mm.

Obv АРХ. ПОР./ДЕСЯТН./ГАВРИЛО/ОНИСИМОВЪ

Rev АРХ. БР./ПАКЛЯ/ ЧЕСКА/ 2. СОРТЬ/Я. К./ 1898

The obverse carries the Archangel Port abbreviation АРХ. ПОР., the rank (*desiatn[ik]*) and name of the Quality Control Officer, Gavriilo Onisimov. The reverse carries the Archangel Quality Control abbreviation АРХ. БР. (= Archangel Br[ak]). The contents of the bale are indicated as ПАКЛЯ ЧЕСКА (heckled codilla), and its quality as 2 СОРТЬ (2nd sort / 9-head). The initials of the producer Я.К. (Ja.K.), are also found on six other Fife seals (See Appendix G and Illustration 27). The seal is dated 1898.

10 CUPMS: 1999.55.3 (See Illus 10 and 26).

Maximum diameter 28 mm x 36 mm.

Obv - /ДЕСЯТ /АЛЕК. ЛОП/[О]Т[О][В]СКОИ

Rev АРХ. БР./ КУДЕЛЬН./ 2 СОРТЬ/В. ЛЕД/ 1838

On the obverse the rank (*desiat[nik]*) and name of the Quality Control Officer, Alek. Lopotovskoi are legible. The reverse carries the Archangel quality control abbreviation АРХ Бр. (Arch[angel] Br[ak]). The contents of the bale are indicated by the abbreviated adjectival form КУДЕЛЬН (tow), and its quality 2 СОРТЬ (2nd sort / 9-head). Then follow the initials and abbreviated name of the exporter or producer ВЛЕД (VLed) in italic which is unusual. However, these initials are found on seven other seals (see also Illus 17 and 20). The seal is dated 1838.

11 CUPMS: 1999.56.6 (See Illus 11 and 27).

Maximum diameter 28 mm x 33 mm.

Obv АРХ. ПО[Р]/ДЕСЯТ/[И][В][А][]-/ПОПО/ВЪ

Rev АРХ. Б[Р]/ КРОНЪ/ 3 СОРТЬ/Е. П./ 1845

The obverse shows the place of origin АРХ. ПО (= Archangel Port) and the rank (*desiat*) and name of the Quality Control Officer, [Ivan] Popov. The reverse carries the Archangel

quality control abbreviation АРХ Б[Р]. (Archangel Br[ak]). The contents of the bale are indicated as КРОНЪ (high-quality flax), of 3 СОРТЬ (3rd sort / 6-head). The initials of the producer Е.П. (E.P.), are found on thirteen other Fife seals (see Illus 21). The seal is dated 1845.

12 CUPMS: 1999.53.16 (See Illus 12 and 28).

Maximum diameter 29 mm x 25 mm.

Obv ДЕСЯТ[:][]-[]-/ЕГОРЪ/ТЕВ[Л][Е]ВЪ/АРХ. []-Р

Rev АРХ. БРА./ КРОНЪ/ 4 СОРТЬ/Д. П./ 1886

The obverse gives the rank (*desiat'[nik]*) and name of the Quality Control Officer, Egor Tevlev, found on five other Fife seals (see also Illus 32). The Archangel quality control abbreviation untypically follows the name. On the reverse the Archangel quality control abbreviation АРХ. БРА. (Archangel Bra[k]) is given, as well as the contents of the bale КРОНЪ (high-quality flax), and its quality 4 СОРТЬ (4th sort). The initials of the producer Д.П. (D.P.), the only example found hitherto in Fife. The seal is dated 1886.

13 CUPMS: 1999.56.7 (See Illus 13 and 29).

Maximum diameter 26 mm x 26 mm.

Obv АРХ. БР./ДЕСЯТЬ/ПАВЕЛЪ/[]-[]-ИХИНЪ

Rev АРХ. БР/ КУД-ЛЯ/ 2. СОРТЬ/Ф. Р./ 1873

The obverse shows the Archangel quality control abbreviation АРХ. БР (Archangel Br[ak]), and the rank (*desiat:*) of the Quality Control Officer, only part of whose name, Pavel []-[]-ikhin, is legible. The reverse carries the same Archangel quality control abbreviation. The contents of the bale are indicated as КУД-ЛЯ (tow), and its quality 2 СОРТЬ (2nd sort / 9-head). The initials of the producer Ф. Р. (F. R.), are found on fourteen other Fife seals (see Illus 18 and 31). The seal is dated 1873.

14 CUPMS: 1999.56.3 (See Illus 14 and 30).

Maximum diameter 28 mm x 31 mm.

Obv АРХ. ПОР./ДЕСЯТН./ВАСИЛИИ/БР[ХАН]/ОВЪ

Rev АРХ. БР./ КУДЕЛЬ/ 1 СОРТЬ/А. Р./ 1847

The obverse shows the place of origin АРХ. ПОР. (= Archangel Port), the rank (*desiatn[ik]*) and name of the Quality Control Officer, Vasilii Briukhanov. The reverse carries the usual Archangel quality control abbreviation АРХ. БР. (= Archangel Br[ak]). The contents of the bale are indicated as КУДЕЛЬ (tow), and its quality 1 СОРТЬ (1st sort / 12-head). The initials of the producer А. Р. (A. R.), are found on four other Fife seals (see also Illus 23). The seal is dated 1847.

15 CUPMS: 1999.57.1 (See Illus 15 and 31).

Maximum diameter 27 mm x 27 mm.

Obv [АРХ]. ПОР./ДЕСЯТСКИЙ/ГРИГОРИИ/КИСЕЛЕВЪ

Rev АРХ. БР./ ЧЕСКА/ 2 СОРТЬ/Ф. Р./ 1897

The obverse shows the place of origin as the port (of Archangel) (АРХ.] ПОР. (= Archangel Port), the rank (*desiatskii*) and name of the Quality Control Officer, Grigorii Kiselev. The reverse carries the usual Archangel quality control abbreviation АРХ. БР. (= Archangel Br[ak]). The contents of the bale are indicated as ЧЕСКА (heckled flax), and its quality 2 SORT: (2nd sort / 9-head). The initials of the producer Ф. Р. (F. R.) are found on fourteen other Fife seals (see Illus 18 and 29). The seal is dated 1897.

16 CUPMS: 1999.55.4 (See Illus 16 and 32).

Maximum diameter 26 mm x 28 mm.

Obv ДЕСЯТНИКЪ/ЕГОРЪ [Т]ЕВЛЕВЪ/ АРХ. БР.

Rev АРХ. БР./ ПАКЛЯ/ ЧЕСКА/ 2. СОРТЬ/ Я. К./ 189[-]

The obverse shows the rank (desiatnik) around the perimeter of the seal and name of the Quality Control Officer, Egor Tevlev, found on five other Fife seals. The Archangel quality control abbreviation АРХ. Бр. untypically follows the name (See also Illus 12 above). On the reverse the usual Archangel quality control abbreviation АРХ. БР. (= Archangel Br[ak]) is given followed by the contents of the bale ПАКЛЯ ЧЕСКА (heckled codilla) of 2 СОРТЬ (2nd sort / 9-head) quality. The initials of the producer Я. К. (Ia. K.), which occur on six other Fife seals (see Illus 22). The seal is dated in the 1890s.

St Petersburg seals**17 CUPMS: 1998.6.3** (See Illus 33 and 57)

Maximum diameter 21 mm x 20 mm.

Obv [Л]-./СЕРО-ХИ[Н]Ъ[Н] 4

Rev СПБ / Но П. 3. / Я.Ф./183[-]

The obverse shows the surname of the Quality Control Officer Serokhin, as well as the number Н 4 (N 4). The reverse indicates in Cyrillic St Petersburg as the port of origin СПБ (SPB), the number Но П 3 (No P 3), the initials of the producer Я. Ф. (Ia.F.), found on a further four seals. The seal dates from the 1830s.

18 CUPMS: 1999.52.24 (See Illus 34 and 58)

Maximum diameter 21 mm x 20 mm.

Obv Л.Д./М. ФЕДОТОВЪ/Н 4

Rev СПБ / Но П. 2. / М.С./[1]833

The obverse shows the initials Л.Д. (L.D.), the name of the Quality Control Officer, M. Fedotov, as well as the number ч4 (N4). The reverse indicates in Cyrillic St Petersburg as the port of origin СПБ (SPB), the number Но П 2 (No P 2), the initials of the producer М.С. (M.S.), also found on a further four seals, and the date 1833.

19 CUPMS: 1999.52.26 (See Illus 35 and 59)

Maximum diameter 20 mm x 20 mm.

Obv Л.Д./З. ШИ[-]ЯЕВЪ/Н 68

Rev СПБ / Но П. 3. / А. В./1833

The obverse shows the initials Л.Д. (L.D.), the initial and surname of the Quality Control Officer, Z. Shi(r)iaev, and the number Н68 (N68) on the next line. The reverse indicates in Cyrillic St Petersburg as the port of origin СПБ (SPB), the number Но П 3 (No P 3), also found on at least nine Fife seals. The initials of the producer are А. В. (A. V.) and the date of the seal is 1833.

20 CUPMS: 1999.54.27 (See Illus 36 and 60)

Maximum diameter 22 mm x 20 mm.

Obv Л.Д./П. }ЕР/БАКО/-

Rev СПБ / Но П. 3. / А.И.Г./18[3]1

The obverse has the initials Л.Д. (L.D.), the initial and name of the Quality Control Officer, P. Shcherbako[v]. The reverse indicates in Cyrillic St Petersburg as the port of origin СПБ (SPB), the number Но П 3 (No P 3) also found on at least

nine Fife seals, the initials of the producer А. И. Г. (A. I. G.) found on three other Fife seals (see Illus 57 and 59). The seal is 19th century, possibly 1831.

21 CUPMS: 1999.53.19 (See Illus 37 and 61)

Maximum diameter 21 mm x 20 mm.

Obv П.ЛПД./П. КАЛ[Т]/УШКИ / Но 9

Rev СПБ / ПШ 2 Н / - /1833

The obverse shows the initials П.ЛПД. (PLPD), the initial and name of the Quality Control Officer, P. Kaltushkin, and the number Чо 9 (No 9), all in Cyrillic. The reverse indicates St Petersburg as the port of origin СПБ (SPB), the Cyrillic letters and number ПШ 2 Н (PSh. 2 N), also found on three other Fife seals. The date is 1833. The initials of the producer are illegible

22 CUPMS: 1999.54.34 (See Illus 38 and 62)

Maximum diameter 19 mm x 20 mm.

Obv П.ЛПД./[-]. СУХО/РУКОВ/ Но 6

Rev СПБ / П. Ш. 2 [Н] / 183[5]

The obverse has the initials П.ЛПД. (P.LPD.), the initial and name of the Quality Control Officer, P. Sukhoro[u]. No 6 (No. 6) follows on the next line. The reverse indicates in Cyrillic St Petersburg as the port of origin СПБ (SPB), followed by the Cyrillic letters and numbers ПШ 2 [Н] (PSh 2 [N]), found on five Fife seals. The initials of the producer are absent. The seal dates from the 1830s, probably 1835.

23 CUPMS: 1999.56.8 (See Illus 39 and 63)

Maximum diameter 21 mm x 20 mm.

Obv П.Л.ПД./Н. СЕЛ/ИНЪ/Но И

Rev СПБ / П. Ш. 2 / 183[-]

The obverse has the initials П.Л.ПД. (P.L.PD.), the initial and name of the Quality Control Officer, N. Selin and finally No I (No I). The reverse indicates in Cyrillic St Petersburg as the port of origin СПБ (SPB), the number П. Ш. 2 (P. Sh. 2) also found on three Fife seals. The initials of the producer are absent. The seal is 19th century, from the 1830s.

24 CUPMS: 1999.57.6 (See Illus 40 and 64)

Maximum diameter 21 mm x 20 mm.

Obv ПЛПД./Р. ШУС/ТОВЪ/ Н. 5

Rev СПБ / Л. 3. 2Н / 1831

The obverse has the initials ПЛПД. (PLPD.), the initial and name of the Quality Control Officer, R. Shustov, and the Н 5 (N. 5). The reverse indicates in Cyrillic St Petersburg as the port of origin СПБ (SPB), the number Л. 3 2 Н (L.Z.2N). The seal is dated 1831.

25 CUPMS: 1999.53.21 (See Illus 41 and 65)

Maximum diameter 21 mm x 21 mm.

Obv Л.Д./Г. СКОРО/ОГАТОВ/Н 65

Rev СПБ / НП. 12. / Ф.Ш. /1839

The obverse has the initials Л.Д. (L.D.), the initial and name of the Quality Control Officer, G. Skoro[b]ogatov and the number Н 65 (N 65). The reverse indicates in Roman letters that St Petersburg was the port of origin (SPB). The number NP. 12. occurs on the next line, followed by the initial F. W. The seal is dated 1839.

26 CUPMS: 1999.52.29 (See Illus 42 and 66)

Maximum diameter 19 mm x 20 mm.

Obv Л.Д./Г. ЗАМАРИНЪ/Н 17

Rev СПБ / Н П. 2. / Ш.Ч./[1]839

The obverse shows the initials Л.Д. (L.D.), the initial and name of the quality control officer, G. Zamarin, as well as the number Ч17 (N17). The reverse indicates in Cyrillic St Petersburg as the port of origin СПБ (SPB), the letters and number NP. 2. and the initials of the producer W.H., all in Roman letters. The seal is dated 1839.

27 CUPMS: 1998.6.7 (See Illus 43 and 67)

Maximum diameter 19 mm x 20 mm.

Obv [Л][Д]/І. ТАР/ПНИНЪ/Н ИИ

Rev СПБ / [Н] П. 3. / П. К. /18[-][-]

The obverse has the name of the Quality Control Officer, I. Tar[p]nin, followed on the next line by the number N II. The reverse shows, all in Roman letters, that St Petersburg was the port of origin, SPB. It is followed by the letters and number НП 3 and the initials of the producer P. K. The seal is 19th century.

28 CUPMS: 1998.6.6 (See Illus 44 and 68)

Maximum diameter 20 mm x 20 mm.

Obv - /Д. ВОР[О]БЬЕВЪ/Н 72

Rev SP / N. P- 2. // 1830

The obverse has the initial and name of the Quality Control Officer, D. Vor[o]b'ev, as well as the number Н 72 (N 71). The reverse in Roman letters shows that the port of origin was St Petersburg, SPB, followed by the letters and number NP - 2 and the initials of the producer I.P. The seal is dated 1830.

Russian seals of uncertain origin**29 CUPMS: 1999.54.39** (See Illus 45 and 69)

Maximum diameter 20 mm x 22 mm.

Obv Л. Д. /ГЪ НИК/ИФОРО/ - -

Rev N. P. / НР. 12 В / 179[-]

The obverse carries the initials Л. Д. (L. D.) and the initial and surname of the Quality Control Officer, G. Nikirofov. The reverse in Roman letters has the initials N. P., followed in the next line by Cyrillic Н Р (written as a monogram) 12 В (NR 12 V). The seal dates from the 1790s (179[-]).

30 CUPMS: 1999.53.29 (See Illus 46 and 70)

Maximum diameter 20 mm x 22 mm.

Obv Л.Д. /А. ЧЕЛ/ПАНО[В]/ Н 54

Rev N P. / ММ. 9 Н / 1799

The obverse carries the initials Л. Д. (L. D.) and the initial and surname of the Quality Control Officer, A. Chelpanov. The number Н 54 (N 54) follows on the next line. The reverse in Roman letters has the initials N. P., followed in the next line by Cyrillic ММ 12 Н (MM 12 N). The seal is dated 1799.

31 CUPMS: 1999.53.24 (See Illus 47 and 71)

Maximum diameter 22 mm x 22 mm.

Obv Л. Д. /А. ПЛО/ТНИК/ Н 69

Rev .NP. / ЕС. 12 К / 17[9]6

The obverse carries the initials Л. Д. (L. D.) and the initial and surname of the Quality Control Officer, A. Plotnik. The

number Н 69 (N 69) follows on the next line. The reverse has the Roman initials N. P., followed in the next line by Cyrillic ЕС 12 К (ES 12 K). The seal is eighteenth century, probably 1796.

32 CUPMS: 1999.53.26 (See Illus 48 and 72)

Maximum diameter 21 mm x 22 mm.

Obv Л. Д. /И. ЛЕВ/ШЕВЪ/ Н 37

Rev .N.P. / АР. 12 Н / 1799

The obverse carries the initials Л. Д. (L. D.) and the initial and surname of the Quality Control Officer, I. Levshev, followed in the next line by the number Н 37 (N 37). The reverse in Roman letters has the initials N. P., followed in the next line by Cyrillic АР 12 Н (AR 12 N). The seal is dated 1799.

33 CUPMS: 1999.56.12 (See Illus 49 and 73)

Maximum diameter 20 mm x 23 mm.

Obv Л. Д. /АБ ЕСЪ/КОВЪ/ Н 8

Rev .N. P. / А. [Б] 12 [Н] / 1805

The obverse carries the initials Л. Д. (L. D.) and the initial and surname of the Quality Control Officer, A. Es'kov. The final line has the number Н 8 (N 8). The reverse has the Roman initials N. P., followed on the next line by Cyrillic А. [Б] 12 [Н] (A[B] 12 [N]). The seal is dated 1805.

34 CUPMS: 1999.56.18 (See Illus 50 and 74)

Maximum diameter 21 mm x 21 mm.

Obv ЛЬ ДЬ /АБ НЕМ/ИЛОВЪ/ Н -

Rev .N P / E R. 12 / 182[-]

The obverse carries the initials ЛЬ ДЬ (L: D:) and the initial and surname of the Quality Control Officer, A. Nemilov. On the final line only the Roman letter N is legible. The reverse has the initials N. P., followed in the next line by ER 12 . The seal dates from the 1820s (182[-]).

35 CUPMS: 1999.57.12 (See Illus 51 and 75)

Maximum diameter 20 mm x 23 mm.

Obv .Л. Д. /М. КОН/ОНОВ/ [Н] 83

Rev .N. P. / I S 12 Н / 1800

The obverse carries the initials Л. Д. (L. D.), followed by the initial and surname of the Quality Control Officer, M. Kononov. The final line has the number [Н] 83 ([N] 83). The reverse has in Roman letters the initials N. P., followed by I S 12 N. The seal is dated 1800.

36 CUPMS: 1999.57.15 (See Illus 52 and 76)

Maximum diameter 20 mm x 22 mm.

Obv Л. Д. /М СИМ/АНОВЪ/ - -

Rev N P / TL 12 / 182[6]

The obverse has the initials Л. Д. (L. D.) and the initial and surname of the Quality Control Officer, M. Simanov. The reverse has the Roman initials N. P., followed in the next line by T L12 [-]. The seal is dated in the 1820s, possibly 1826.

37 CUPMS: 1999.54.42 (See Illus 53 and 77)

Maximum diameter 21 mm x 23 mm.

Obv [Л] Д [-] МЕС/НИКОВ/ Н 118

Rev N. P. / I H 12/ 182[-]

On the obverse only the initial Д. (D.) is legible in the first line. It is followed in Cyrillic by the surname of the Quality

Control Officer, Mesnikov and on the last line the number H 118 (N 118). The reverse in Roman letters has the initials N. P., followed in the next line by I H 12. The seal dates from the 1820s (182[-]).

38 CUPMS: 1999.53.32 (See Illus 54 and 78)

Maximum diameter 22 mm x 22 mm.

Obv Л. Д. / И. ШЕ[Р]АПО / Н 38

Rev ..N. P. / AK 12 H / .1788

The obverse has the Cyrillic initials Л. Д. (L. D.) and the initial and surname of the Quality Control Officer, I. She[r]apo[v]. The final line has Н 38 (N 38). The reverse in Roman letters has the initials N. P., followed in the next line by Cyrillic AK 12 H (AK 12 N). The seal is dated 1788.

39 CUPMS: 1999.52.37 (See Illus 55 and 79)

Maximum diameter 22 mm x 18 mm.

Obv ЛД./Е. ДЕМ/ЯНОВЪ/ [-]Н [-] О

Rev NP / ИМБ12 [-]/1818

The obverse shows the initials ЛД. (LD.), the name of the Quality Control Officer E. Demianov, as well as the Cyrillic letters and number [-]Н [-] О ([-]N [-] O). The reverse carries the Roman initials NP, followed in the next line by Cyrillic ИМБ 12 - (IMB. 12 -) and in the final line the date 1818.

40 CUPMS: 1999.56.14 (See Illus 56 and 80)

Maximum diameter 19 mm x 22 mm.

Obv Л [Д] / С ДЕМ/ЯНОВЪ/ Н І—

Rev N. P. / F 12 H / [1]806

On the obverse only the initial Л. (L.) is legible. It is followed on the next two lines by the initial and surname of the Quality Control Officer, S. Dem'ianov. The final line has Cyrillic Н І (N I). The reverse in Roman letters has the initials N. P., followed in the next line by F 12 H. The seal is dated 1806.

Acknowledgements

The author acknowledges his gratitude to Mr J. Gosk of Methil, Fife and D. Drummond of Dundee for their help in identifying sites where Russian lead-alloy seals have been discovered. He also acknowledges his indebtedness to Brian Watson of Pittenweem, Kevin Bereton and Jim O'Donnell of Cuparmuir who kindly presented their collections of Russian seals to Fife Museum Services [East], thus enabling the present work to be carried out. He acknowledges a considerable debt to Michael King of Fife Museum Services (East) for his encouragement and help during the preparation of this article, to Geoff Egan of the Museum of London for his valuable comments and advice on the presentation of this complex material and finally to Elena Iukhimenko and Rosemary Fasey for their help in making contact with Russian scholars in Moscow and St Petersburg, respectively. He also wishes to thank the Curators of the museums in Montrose, Arbroath, Falkirk, Perth, Edinburgh and Cromarty for permitting him to examine Russian seals in their collections.

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Abstract

Lead seals, although known from various European countries and usually referred to as 'Russian flax bale seals', have been little studied. They can, however, provide information on their town of origin, contents of the bales they sealed, and initials or names of owners and inspectors in Russia responsible for quality control. The article studies 233 seals found in Fife and provides a guide to their identification, sets out characteristics by which seals from different Russian towns can be recognised and points out changes in their design from the late 18th to early 20th century.

Keywords

bale
flax
Fife
lead
quality control
Russia
seals