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CLAY TOBACCO PIPES FROM THE
MECHANICS INSTITUTE, AUCKLAND (1843-1879)

Jenny Goodwyn
Department of Conservation
Auckland

Demolition of the Dykes Building in preparation for redevelopment of the area by NZI provided an opportunity for archaeological investigation of one of Auckland's oldest public buildings by the Regional Archaeology Unit, Department of Conservation.

The original allotment, number 26 of City section 4, was granted in 1843 to the Mechanics Institute. They later built premises on the site to hold a library (with, possibly, accompanying accommodation) and facilities for public meetings. Two further buildings, abutting the original structure, were constructed in 1857. A dwelling for the librarian is known to have been present on the site from this date.

In December 1879, due to financial embarrassment, the Mechanics Institute transferred title of the land and buildings to the Auckland City Council. The Council continued to use the premises as a library until 1887 (Colgan 1980:39).

No further development, save for the temporary siting of a shed to the rear in 1875 and another in 1908, occurred until 1912. At that time the allotment, until then a sloping site rising to a ridge to the west, was levelled, divided into three portions, and a building constructed on each. These were known, most recently, as the Chamber of Commerce building (north lot), Nagel House (south lot), and the Dykes Building (middle lot) (Robinson 1988).

Archaeological Investigations

A total of seven days of excavation work was undertaken in July and August 1988. This revealed that prior to the 1912 construction, the levelling included cutting down the higher areas and using the spoil to fill over the lower slopes. Quantities of cultural debris were derived from the spoil spread over the site, and from three rubbish pits cut into the subsoil below. Laboratory examination of the complete artefactual assemblage showed, however, that all the material derived from one basic accumulation of rubbish as fragments of artefacts from a variety of different contexts were found to match or join. This was most noticeable amongst earthenware vessels, but was also observable in glass, stoneware, and clay tobacco pipe material (Goodwyn in prep. a). The date ranges

indicated that this accumulation had taken place over the period of occupation of the site by the Mechanics Institute (1844-c.1880).

Clay Tobacco Pipe Assemblage

A total of 93 fragments of white ball clay tobacco pipe were recovered archaeologically (Table 1).

Table 1

Pipe Type Frequency

Description	Number
unmarked pieces	57
pieces with a maker's mark	22 *
decorated pieces	3
specific styles	5
others	<u>5</u>
	<u>92</u>

* includes two fragments which joined.

McDougall

Duncan McDougall operated the Glasgow Pipe Manufactory from 1847 to 1871 when the Company changed its name to D. McDougall and Co (Walker and Walker 1969:133). The firm operated out of 277 Parliamentary Road until 1889 when it moved to Charles Street (Sudbury 1980:29). The Company continued to produce the basic styles, though with an ever increasing range of varieties in the 1900s.

SCOTLAND replaced GLASGOW on the stem (Sudbury 1980:37) after the 1891 McKinley Act in the USA required imported goods to be marked with the country of origin (Walker 1983:3).

Ten pipes (nine stems and one bowl) of the 22 with a maker's mark can be attributed to this company. All have part or the whole name impressed on one side and GLASGOW on the other, in serif lettering. Seven of the stems are noticeably heavier (Fig. 1A). Alexander (1983:221) states that this is a diagnostic trait. He further suggests that such stems were made in the first years of the Company's existence and proposes a date of manufacture around 1850. Two stems (Fig. 1B) are finer and have smaller lettering, just under 1.5 mm in height. In the same report Alexander describes a similar stem and dates its production to between 1865 and 1868. The one bowl (Fig. 1C) in the McDougall assemblage has rouletting round the rim and the name impressed by an oval die. This item almost certainly did not join with any of the stems as it seems unlikely that a complete pipe would have the name inscribed in

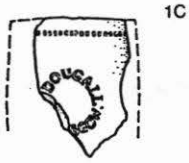
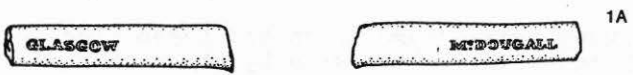


Figure 1.

both positions. Here again, precise date of manufacture cannot be ascribed, but with the GLASGOW mark it is certainly from the 19th century.

William Murray and Company/Thomas Davidson and Company

Walker (1983:13) states that this company, also known as the Caledonian Pipe Works, was founded by Murray who had been associated with the Caledonian Pottery from 1826. The Company continued in business until 1861-2 when it was purchased by Davidson, a former employee, and possibly manager, of William Murray (Walker 1983:13). Pfeiffer (1986:79) believes that during the Davidson ownership, and possibly earlier as well, the company produced pipes only for the export trade.

Six pipes can be attributed to these firms. All are impressed in sanserif lettering. One bears the complete citation MURRAY on one side and GLASGOW on the other (Fig. 1D). Two others have only portions of these words. These three date from between 1826 and 1862. The Davidson ownership era is represented by three examples. One pipe reads DAVIDSON on one side and GLASGOW on the other (Fig. 1E). A second, with part of a bowl and a complete heel, has D on one side and W (Fig. 1F) on the other, whilst the third representative has IDSON and GLASGOW on the same side and no obvious lettering on the other (Fig. 1G). All these Davidson pipes must have been manufactured between 1862 and the end of the 19th century.

Thomas White and Company

Conflicting dates have been reported for this Edinburgh Company. Oswald (1975:206) gives the dates as 1832 to 1864 but Walker (1983:20) believes that the firm began production in 1823 and did not close down until 1876.

Three, possibly four, pipes can be attributed to this firm. Three have part of the Company name and its city impressed in serif lettering - two have THO WH on one side and BURGH on the other (Fig. 2A). The third has TE & CO and EDIN respectively. This third fragment was not part of either of the other two pipes.

The fourth stem piece has the complete word EDINBURGH impressed on one side but no identifiable letters on the other. The lettering is in sanserif style. It is not known whether Thomas White and Company employed sanserif lettering. Walker (1983:71) depicts three variations of the maker's mark. All are in serif lettering but differ from the present specimens, which are similar to those recovered from the Omata Stockade, Taranaki (Prickett 1983:440). It is possible, therefore, that we have a pipe made by another Edinburgh firm. Oswald (1975:204-6) lists 14 other mid to late 19th century

Edinburgh pipe manufactories. To date, however, no examples of their work have been reported from Australia or New Zealand.

Ring and Son

This was the most important 19th century pipe-making concern in Bristol, and specialised in production for the export market (Walker 1983:4-5). It began operations in 1803 and continued until 1883, when "the business [was] probably taken over by Hawley and Son (later Hawley and Company, the Hawley Brothers) who continued to manufacture pipes until 1901" (Walker 1983:4). Oswald (1975:158) states that the Company traded under the name of Ring and Co from 1803 to 1848 and as Ring and Son between 1850 and 1853. Hawley and Son operated from 1884 to 1901 (Oswald 1975:154).

One specimen (Fig. 2B) from this manufacturer was found during excavation. It is impressed RING & SON BRIS in sanserif lettering. On the basis of Oswald's information, this pipe must have been made between 1850 and 1853.

Charles Crop & Sons

This London manufacturer operated from 1856 to 1924 working from Hoxton (1856-1871), Kingsland (1865), and later Brooksby Walk, Homerton (Oswald 1975:133, Atkinson and Oswald 1969:58). Prickett (1983:439) suggests that this Company may have made some pipes specifically for the export trade, supporting this claim by noting that the Taranaki Museum has a bowl manufactured by this firm stamped "Heywood/Lyttleton/NZ".

Two pipes are attributable to this Company. Both are impressed with part of the name in sanserif lettering. One specimen has a curved stem (Fig. 2C) and may be similar to the complete curved-stemmed example found in another part of the NZI redevelopment area. This stem has a registration mark which indicates that this style of pipe was first registered on 8 June 1861 (Goodwyn in prep. b). The second specimen in the assemblage would have had a straight stem. Presuming that the effects of the 1891 McKinley Act were similar throughout Britain (see above), the presence of LONDON on this stem would indicate a 19th century date of manufacture.

William White

William White took over the pipemaking branch of the 18th century Corporation of Tobacco-Spinners of Glasgow (Walker 1983:13). Founded in 1805, the Company was listed as "William White and Son" from 1846 to 1864 and from 1897 to 1926, as "William White and Sons" from 1865 to 1896, and finally as "William White and Son (Glasgow) Ltd". However, Walker has seen only one stem marked WHITE & S(ON) or S(ONS). This pipe

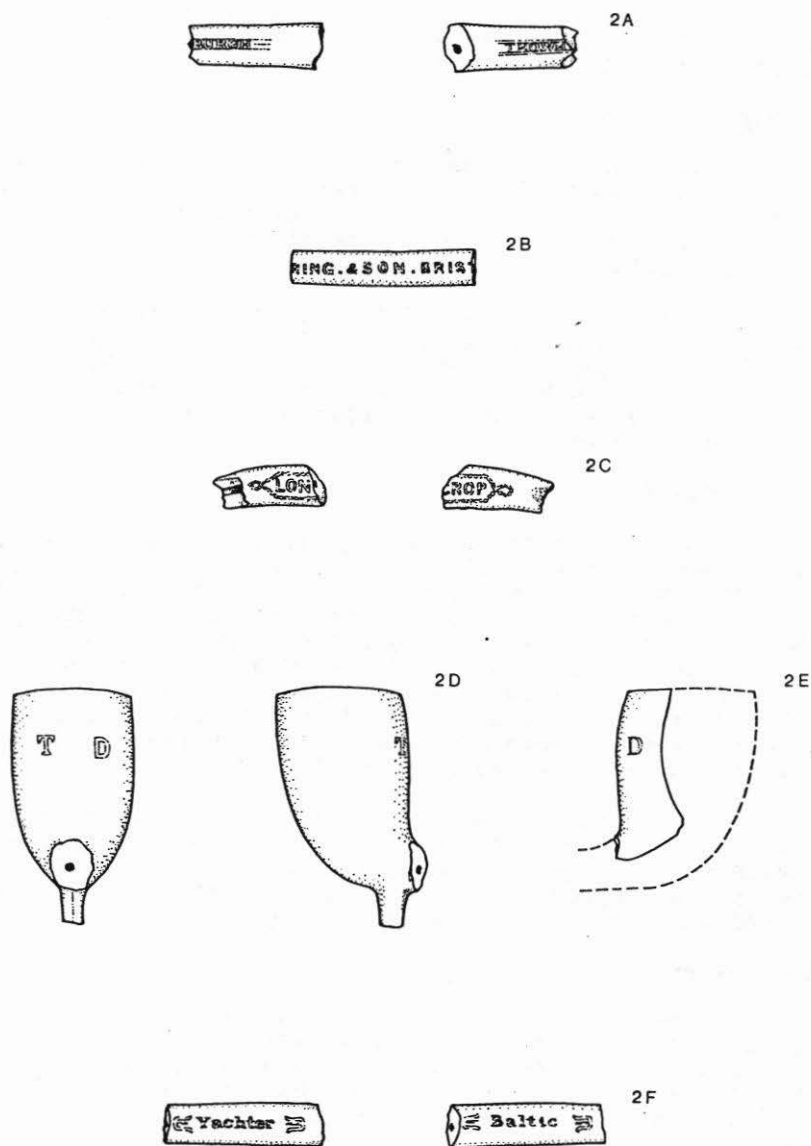


Figure 2

bears the letters ON SCOT on the other side and must date to the 1890s or 1900s.

One fragment of stem may have been produced by this company. It bears an impressed E on one side and a rather indistinguishable, possible G on the other.

T D Pipes

T D pipes have been made for 200 years. The type was possibly developed by Thomas Dormer who worked at two London locations in the mid 18th century. Alexander (1983:198) indicates that Dormer's pipes were of such good quality that they were copied by his contemporaries.

Two different examples of T D pipes were found. One is a whole bowl, with heel, impressed T D (Fig. 2D). It is similar to Alexander's type VIII which has been dated 1850-75 (1983:202). The other specimen (Fig. 2E) is of a similar size, with lettering in the same relative position, but with the lettering embossed.

Yachter Baltic

Both William White and McDougall, and possibly other Glasgow manufacturers, produced this style of pipe (Walker 1983:17). McDougall's "Irish Price List" of c.1875 includes as no. 43 a category itemised as BALTIC YACHTING. Sudbury (1980:32-3) discusses this Price List. He presumes that the numbers run in chronological order; deduces that type no. 34 was introduced in 1860-62 whilst type 147 originated in 1871 or 1872. He further suggests that from 1861 to 1872, an average of 10.4 new types were added annually. On this basis style no. 43 would have been added by about 1862-4.

The Dykes Building assemblage contained one, possibly two, examples of this type of tobacco pipe. One is impressed YACHTER on one side and BALTIC on the other (Fig. 2F). The other has an impressed letter similar to the "R" employed in the YACHTER and may also be of that type.

The Tourist

One complete bowl, with heel, bears this inscription impressed on the front of the bowl (Fig. 3A). The design is not circular. The bowl height is 40.9 mm; external width laterally is 24 mm; external width back to front is 25.1 mm; width of rim varies from 3.75 mm to 4.25 mm.

There is no documentary evidence regarding this pipe type. It is not listed in Sudbury's (1980:46) McDougall's "Irish Price List" of c.1875.

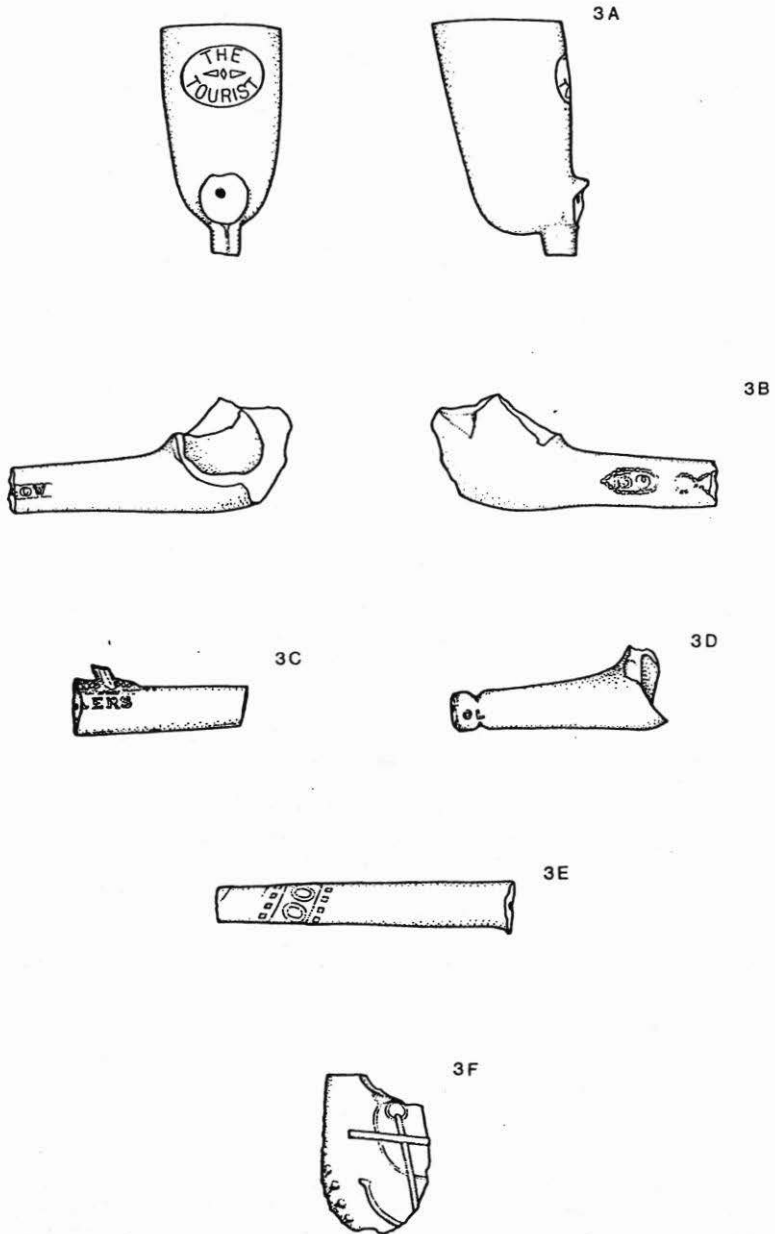


Figure 3

Miscellaneous Pipe Fragments

One stem fragment is impressed 30 on one side and .OW on the other (Fig.3B). The OW is presumably part of the word GLASGOW and indicates the place of origin and a 19th century date of manufacture. McDougall's "Irish Price List" of c.1875 lists no. 30 as a "Small Donald" (Sudbury 1980:46). This type of pipe has not been recorded in New Zealand.

One stem is impressed ERS (Fig. 3C). Originally there was some zoomorphic figurine-like motif above these letters.

One stem fragment with part of its bowl is impressed .OL (Fig. 3D). Tooth marks on either side of the OL indicate that the pipe continued to be used after the mouthpiece had broken off. The city of manufacture of this pipe was probably Bristol and the maker may have been Ring.

Another stem fragment also has tooth marks indicative of continued use after the original mouthpiece had broken off. In this case the stem is decorated with rouletting (Fig. 3E).

Part of an anchor is embossed on one bowl fragment (Fig. 3F). This seems to be a common design used on pipes. It may indicate that the pipe was purchased at a Crown and Anchor Hotel, or had some nautical connection. However, this anchor is unlike any others on clay pipes reported from New Zealand sites.

Ten stem fragments were glazed. "Simple" mouthpieces with a slightly rounded-off end sometimes had a glaze added to stop the smoker's lips sticking to the porous clay. Glaze colour depended upon the manufacturer's preference. Glasgow companies tended to use a yellow-brown glaze while Ring of Bristol used a green glaze (Walker 1983:39). All the specimens in this assemblage have a yellow-brown glaze which indicates that they were probably made in Glasgow.

Two stem fragments have "formed" mouthpieces. Unlike "simple" mouthpieces these have flared-shaped ends allowing the user to hold the pipe more easily in the mouth. Walker (1983:39) states that this was originally a French trait copied by British manufacturers. One example is unglazed; the other has a yellow-brown glaze and is probably of Glaswegian origin.

DISCUSSION

Twenty-two pipes from the assemblage can be securely attributed to maker. A further four can be tentatively assigned to either manufacturer or place of manufacturer. Of these, 20 are of Scottish origin, with possibly another three in this grouping. This supports arguments of Walker (1983:11),

Sudbury (1980:36), Humphrey (1969:18), and Jack (1986:126) that Scotland, and more specifically Glasgow, was the centre of the British pipe making industry in the nineteenth century, and was particularly active in the field of exporting. Furthermore, of these 20 pipes, 10 were produced by McDougall. At least seven of these McDougall pipes were probably made in the 1950s. Jack (1986:126) asserts that McDougall had been the dominant firm exporting to Australia since at least the 1850s.

The situation in New Zealand is unclear to date. Prior to 1987 few excavations had yielded large quantities of clay pipe material which could be attributed to maker. Three exceptions are the Omata Stockade and Warea Redoubt, excavated by Prickett (1983), and Fort Galatea, investigated by Spring-Rice (1983). Table 2 shows the distribution by maker and supports documentary evidence that Glasgow was the most active centre for exporting clay pipes in the second half of the 19th century. Furthermore, the McDougall and the Murray/Davidson consortium are represented in all these assemblages.

The Omata and the Mechanics Institute assemblages evince a dominance of McDougall-made pipes. Whilst Warea and Fort Galatea do have McDougall pipes present, the greater number of pipes were made by Davidson. Only two concerns are represented in the latter two assemblages (McDougall and Murray/Davidson). Both of these sites, occupied for a time by the Armed Constabulary (Spring-Rice 1983:136, 140), are located in inaccessible areas. Their assemblages may reflect bulk buying and the consequent lack of purchaser choice. The Omata Stockade, near New Plymouth, was occupied by local civilian farmers formed into Taranaki Militia (Spring-Rice 1983:139). The Mechanics Institute was built for Auckland's civilian population. Users of these latter two sites may have had access to a wider market and the assemblages show purchaser preference. Analysis of the 19th century Auckland assemblages may elucidate the importation trends in 19th century New Zealand.

Clay tobacco pipes are brittle. They break easily. As a result, the length of time each individual item is used is relatively short. In most cases they would have entered the archaeological record within no more than a few years of their date of manufacture. Only two bowl fragments have interior discolouration as a result of prolonged use whilst two stems show signs of remodelling the mouthpiece. These latter two may be the result of parsimony rather than longevity.

All pipes to which manufacturers can be attributed were probably made prior to the introduction of the McKinley Act in 1891 and definitely before 1900. Of the 25 pieces of clay tobacco pipe material that can be assigned a production date, 16 examples were probably made between c.1850 and 1870, whilst

Table 2.

Frequency of attributable pipes in NZ sites

	Omata (1860-67)	Warea (1865-68)	Fort Galatea (1869-87)	Mechanics Institute (1844-79)
McDougall	29	8	11	10
Davidson	6	22	17	3
Murray	3	2	2	3
Thomas White	4	0	0	3/?4
William White	9	0	0	?1
Balme	7	0	0	0
Crop	2	0	0	2
Higgins	2	0	0	0
Joseph	1	0	0	0
Milo	1	0	0	0
Ring	0	0	0	1/?2
Sparnaay (Dutch)	1	0	0	0

(after Prickett 1983:439, 544, Spring-Rice 1983:136-140).

a further piece was made prior to 1875. Of the rest, the Yachter Baltic style of pipe was possibly introduced in the mid 1860s, the two Crop pipes were manufactured after 1856, the three Davidson pipes after 1862, and the remaining two some time in the 19th century. Sixty-eight percent of the pipes can thus be dated prior to 1875, and it is possible that the remainder, which cannot be so closely dated, were also produced by that date. It is, therefore, probable that all the clay pipe material relates to the Mechanics Institute period (1844-1879).

This is the first collection of pipes reported from 19th century Auckland. It shows some similarity with sites from other areas in New Zealand. Analysis of pipes from other central Auckland sites (currently underway), will show whether the patterns recognised here accurately reflect the New Zealand situation.

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