MATERIAL APPROACHES TO POLYNESIAN BARKCLOTH
MATERIAL APPROACHES TO POLYNESIAN BARKCLOTH: CLOTH, COLLECTIONS, COMMUNITIES

edited by
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From Maker to Museum: Polynesian Barkcloth at the Royal Botanic Gardens, Kew

Mark Nesbitt, Brittany Curtis, Andy Mills

Introduction

Founded in 1847, the Museum of Economic Botany at Kew Gardens, in west London, was the first of its kind (Figure 17.1). Drawing on the latest technologies of glass and wrought iron, the Museum displayed plant raw materials and products over two floors in Decimus Burton’s conversion of a royal fruit store (Cornish, 2017). The Museum’s founder, and Director of the Royal Botanic Gardens, Kew, was Sir William Hooker. He rapidly articulated a scope for the museum, ‘all kinds of useful and curious Vegetable Products, which neither the living plants of the Garden, nor the specimens in the Herbarium could exhibit’, a method of display, ‘the raw material, and, to a certain extent, also the manufactured or prepared article… correctly named, and accompanied by some account of its origin, history, native country, etc.’, and an audience of ‘...not only the scientific botanist, but... the merchant, the manufacturer, the physician, the chemist, the druggist, the dyer, the carpenter and cabinet-maker, and artisans of every description’ (Hooker, 1855).

Tapa cloth was part of the Museum from its opening. Accession number 3.1847 on the first page of the first Museum Entry Book is ‘An extensive collection of specimens presented by Sir E. Home R.N. consisting of a Kava bowl and tow; stems of the Kava plant Piper methysticum; various specimens of Tapa cloth; shells and beater for preparing the Tapa cloth; Type made of Pandanus leaves for printing the cloth; Rough mats made of vegetable fibre from the Navigators and Friendly Islands.’ This group of items well illustrates the distinctive nature of an economic botany collection: the combination of raw materials, tools and finished products, identified by the botanical name of the plant. At Kew these were arranged by plant family, to enable visitors to understand how related plants often share properties, for example, the many genera in the mulberry plant family (Moraceae) that are used for barkcloth worldwide.

The global scope of the collection means that although it was large, growing to about 70,000 specimens spread over four buildings by 1910, coverage of a given plant use is typically shallow. There are many exceptions – for example, there are world class
collections of Japanese paper and lacquer, artefacts from the northwest Amazon, and objects from the East India Company's museum - but in the case of tapa, just 55 pieces cover the whole of Polynesia (Table 17.1). The collection originally numbered perhaps another 30 pieces, but many ethnographic objects were given to the British Museum, Pitt Rivers Museum and Horniman Museum in 1958-61, to relieve pressure on space. That the majority of the tapa cloths were not transferred is doubtless a result of their invisibility to the museum curators who made the selection of objects. Given the emphasis of the Kew Museum on the usefulness of plants, tapa cloth was displayed folded, often hiding features of interest such as its ornamentation, or construction as garments. It is only as Kew's Polynesian barkcloths have been studied and treated by textile conservation students over the last two decades that their function as garments, and thus as constructed objects rather than samples of cloth, has come to the forefront (Lennard, Tamura and Nesbitt, 2017). The tapa collection reflects the Museum of Economic Botany's broader trajectory. In the early 20th century the Museum began to focus on raw materials rather than objects, and the overall number of acquisitions fell sharply after 1914, only sustained by the acquisition of major ‘orphan’ collections of raw materials from other collections from the late 1980s onwards. This shift came about as a result of several trends: the development of specialist institutes elsewhere, the increasing focus of botanists in general on understanding the distribution and relationships of wild plants and, from the 1950s, increased interest in oil-based synthetic products (Nesbitt and Cornish, 2016). As a result, Kew's tapa collection largely dates to the mid-late 19th century. In addition, as a result of the quiet neglect of the Museum in the 20th century, the tapa specimens have been little affected by inappropriate conservation, or by the regular cutting of pieces to supply samples that is typical of many museum collections.
In 1988-90 the former Museum buildings were repurposed, and the entire collection, now renamed the Economic Botany Collection (EBC), was moved to purpose-built storage in the Sir Joseph Banks Building. A case of tapa was shown in Kew’s Plants+People exhibition (1998-2016), pieces have been lent to several exhibitions (e.g. Sainsbury Centre for Visual Arts, 2006; Rautenstrauch-Joest-Museum, Cologne, 2014), but the main emphasis in the last decade has been on conservation and research. Since 1995 students from the Textile Conservation Centre (since 2010 the Centre for Textile Conservation and Technical Art History at the University of Glasgow) have undertaken repacking and interventive conservation of Kew’s tapa collection (Lennard, Tamura and Nesbitt, 2017). For the Situating Pacific Barkcloth project the whole tapa collection was moved to Glasgow for conservation and study (see Chapter 22). Other research, by Brittany Curtis (2016) on the HMS Galatea expedition, and by the Mobile Museum project team on the dispersal of ethnobotanical specimens from Kew (Cornish and Driver, 2019), has also shed much light on the current location of former Kew specimens. One mystery yet to be solved is why 36 pieces of tapa were among the many objects sent by Kew to schools for educational purposes in the period 1880-1914; it is unclear from which tapa specimens these were sourced, or what was their pedagogical use.

Formation of the Kew collection
Kew was rarely able to commission economic botany specimens to order. Instead, it spread its net wide (Table 17.1). Travellers of many different types were asked to collect for Kew, usually without payment but with free transport for goods to Kew. William Hooker’s text in the Admiralty’s Manual of Scientific Enquiry offered guidance on what to collect, and emphasised that ‘the several stages of preparation should be collected, not only as objects of curiosity, but because they exemplify the progress of art and science’ (Herschel, 1849). Unsurprisingly, given the island topography of Polynesia, naval officers are an important source, including Sir James Everard Home (HMS North Star, HMS Calliope, 1840s), Lt. Marshall (ship not yet identified) and Captain Jenkin Jones (HMS Curacoa) on behalf of Pitcairn residents, Lt. George G. Webber, and on an official tour, Prince Alfred, Duke of Edinburgh (HMS Galatea). Lady Robinson used the colonial networks of her husband Sir Hercules Robinson. The Reverends Thomas Powell, William Wyatt Gill and John H.L. Waterhouse were part of an active programme of missionary enterprise in the Pacific during the second half of the 19th century. Other specimens were collected by naturalists Andrew Bloxam, Berthold Seemann and William Hillebrand, while commerce is represented by William Miller Christy, (Stephen) William Silver, of the India-rubber, Gutta-percha, and Telegraph Works Co., and perhaps Donald Rigby Smith.

In this paper we focus on seven collectors with different forms of relationship with Kew, which in part explain the nature of the Kew collection and its usefulness as a resource for rediscovering Polynesian tapa traditions.

Naturalist: Andrew Bloxam
The Rev. Andrew Bloxam (1801-1878) gave his collection of small, cut pieces of tapa to the Museum of Economic Botany in 1856. They were collected in Hawai‘i (then the Sandwich Islands) in 1825, under tragic circumstances. King Kamehameha II and his wife Queen Kamamalu travelled to England with the aim of meeting King George IV and reinforcing relations with the British government, arriving on 24 May 1824 (Corley, 2008; Shulman,
| Place of Origin | Date of Collection | Collector or Donor | Objects | Barkcloth Publication |
|-----------------|-------------------|-------------------|---------|-----------------------|
| Solomon Islands | 1876              | Lady (Nea) Robinson (wife of Sir Hercules Robinson, colonial administrator) | 42959 sheet worn as skirt |  |
| Solomon Islands | Donated 1929      | John Henry Lowry Waterhouse (missionary) | 42760 3 sheets |  |
| Futuna          | Possibly 1950s, donated 1998 | Marianne Cribb (wife of Kew botanist Phillip Cribb) | 73928 large sheet |  |
| Fiji            | Donated 1855      | William Grant Milne | 42882 demonstration pieces; 42876 2 masi isala; 42907 3 clubs for beating barkcloth; 42842 dyed barkcloth |  |
| Fiji            | 1879-1880, donated 1908 | Mary Balfour Smith (wife of Donald Bigby Smith) | 42888, 42889 masi isala (turbans), 42891 tiputa |  |
| Fiji            | Unknown           | Unknown           | 42956 'sarong' |  |
| Tonga           | Donated 1847      | Sir James Everard Home, R.N. (Royal Navy, HMS North Star and HMS Calliope) | 43023 large sheet; 42913 kupesi (printing board, bearing label from 42914, incorrectly affixed in 19th century) |  |
| Samoa           | Donated 1847      | Sir James Everard Home, R.N. (Royal Navy, HMS North Star and HMS Calliope) | 42952 and 42861 tiputa |  |
| Samoa: Upola    | Donated 1844      | Unknown (J.E. Home?) | 42884 roll of inner bark |  |
| Samoa           | Donated 1866      | Rev. Thomas Powell (missionary) | 42914 Upeti falo (printing board, bearing label from 42913, incorrectly affixed in 19th century) |  |
| Samoa           | Unknown           | Unknown           | 42863 large sheet; 42905 tiputa |  |
| Samoa: 'Upolu'  | Unknown           | Unknown (J.E. Home?) | 42887 board and shell for preparing bark |  |
| Samoa           | Donated 1878      | Collected 1874-78 by Edgar Leopold Layard; donated by Stephen William Silver. | 42862 2 large sheets |  |
| Cook Islands: Rarotonga | Donated 1850 | William Miller Christy (trader, father of the collector Henry Christy) | 42953 large sheet with multi-legged creatures | Hooper, 2006: 224 |
| Cook Islands: Harvey Islands | 1852-72 | Rev. William Wyatt Gill (missionary) | 42978 large sheet |  |
| Society Islands: Tahiti | 1869 | Prince Alfred, Duke of Edinburgh (royal family) | 42947 2 plain tiputa; 73328 and 73329 ornamented tiputa; 42958 2 sheets and 1 tiputa; 42977 'skirt' | Curtis, 2016 |
| Pitcairn        | 1841              | Frances Heywood (wife of Peter Heywood, Bounty mutineer) | 42955, made and given by Charlotte (Little Peggy) to Lieut. Marshall; 42960 2 pieces via Captain Jenkin Jones of HMS Curacoa (1841), made by Mauatua (Mrs Christian) and Teraura (Mrs Young) | Murray, 1860: 160; Reynolds, 2012; 2016 |
| Hawai‘i         | 1825              | Rev. Andrew Bloxam (naturalist on HMS Blonde) | 42853 6 small pieces; 42885 8 small pieces; 42849 3 he‘e kapaola (bamboo printing stamps) |  |
| Hawai‘i         | 1850              | Dr Berthold Carl Seemann (naturalist on HMS Herald) | 43736 large sheet |  |
| Hawai‘i         | Donated 1862      | Dr William Hillebrand (naturalist) | 42964 large sheet |  |
| Hawai‘i         | 1869              | Prince Alfred, Duke of Edinburgh (royal family) | 42890 sheet; 42965, 42966, 42967 3 kapa moe (bed coverings) |  |
| Hawai‘i         | Unknown           | Unknown           | 67802 2 small pieces, probably 19th-century |  |
| ‘Madagascar’ but probably Oceania | Donated 1944 | Mrs Rathbone | 42980 |  |
| ‘South Seas’    | Donated 1869      | Lt. George G. Webber, R.N. | 42979 |  |

Table 17.1. Summary of barkcloth from Polynesia and adjacent regions held at the Economic Botany Collection, Kew.
Figure 17.2. a) Six (of total 14) pieces of tapa from Hawai‘i, collected by Andrew Bloxam in 1825 (Kew, EBC 42853). b) Black cloth from the funeral of King Kamehameha II and Queen Kamamalu (Kew, EBC 42885). Photographs before conservation.
Both died of measles in July, and HMS Blonde was commissioned to return their bodies to Honolulu (Byron, 1826; Macrae, 1922; Dampier, 1971). The ship arrived there on 6 May 1825, staying for two months. Bloxam was the ship’s naturalist, and is known for his bird collections and his diary of the voyage (Bloxam and Jones, 1925; Olson, 1996).

Bloxam had corresponded with Sir William Hooker since 1839, while Hooker was still Professor of Botany at the University of Glasgow. In a letter to Sir William of 1856, Bloxam lamented that parenting six children, as well as parochial and teaching duties, had prevented him from ever visiting Kew; nonetheless he sent Hooker many queries and specimens relating to botany in the English Midlands (DC 36/107). Bloxam’s natural history specimens from Hawai‘i went in 1826 to the British Museum, now London’s Natural History Museum (Berkeley, 1878). However he retained his tapa collection, sending it to Kew (his only gift to the Kew Museum) in 1856 with a brief note. Further information is captured in the Museum Entry Book which also records: ‘The sticks show the manner by which patterns were printed on the Tapa’; these are the three bamboo sticks (catalogue number 42849) lacking a donor name in the EBC database. The sticks are stained with pigment, showing that they were used. The Entry Book also notes a ‘Curious specimen of Tapa from the Island of Manti, South Pacific’, referring to Mauke in the southern Cook Islands. This piece has not yet been found at Kew, but may yet be found in one of the museums that received Kew collections.

14 pieces of Bloxam’s tapa remain at Kew, each about 15×10 cm in size (Figure 17.2a). Until recently these were stored loose; they bear no sign of previous mounting on paper. However, in format and style the pieces are reminiscent of those mounted in Alexander Shaw’s 1787 compilation, A catalogue of the different specimens of cloth collected in the three voyages of Captain Cook, to the southern hemisphere. As with Shaw’s original pieces of tapa, cut into pieces to fill at least 60 copies of the book, Bloxam’s specimens manifest considerable mobility. Glasgow’s City Industrial Museum received at least nine similar pieces via the Linnean Society, while three pieces described as ‘Kapa collected by the Bloxam brothers, voyage of HMS Blonde, 1825. Top sheet kapa moi, second sheet, third sheet’ were cut up and distributed in Severson’s (1978) portfolio.

The 1820s represent a period of significant change in Hawai‘i: the consolidation of a single government of the islands by the royal family, the arrival of American missionaries, and increased settlement by traders in response to the whaling and sandalwood industries. The royal visit to England was in part prompted by Hawaiian desires to seek British protection at a time of increased international interest in the islands. Tapa cloth was still widely worn and made in 1825; the publication of the ship’s voyage records the wearing of tapa and its use as a bedroom screen. Only one of the Kew pieces has a recorded context: a corrugated, black piece of tapa is recorded in Kew’s Museum Entry Book as ‘used at the funeral of the King and Queen of the Sandwich Islands’ (81.1856; Figure 17.2b). This is doubtless the cloth referred to in Bloxam’s journal, ‘Wednesday May 11, 1824 ... We then proceeded to Karaimoku’s house, which was hung with black tapa.... [The coffins were] placed on a platform with black.’ (Bloxam and Jones, 1925: 37). The complex designs of these pieces of kapa, or Hawaiian tapa, is in contrast to the simpler designs in Shaw’s book, demonstrating the impact of the arrival of metal tools in Polynesia, which encouraged the carving of more elaborate designs (Kaeppler, 1975: 11).

1 References to DC are to Directors’ Correspondence volume and folio numbers, held in the central Archive of the Royal Botanic Gardens, Kew.
Royal Navy captain: Sir (James) Everard Home

The dedication of volume 73 of *Curtis's Botanical Magazine* is to ‘Captain Sir Everard Home, Bart., R.N. who has largely contributed, both to the living collection and to the museum of the Royal Gardens, the botanical results of his long and distant voyages, the present volume is dedicated, with sentiments of regard and esteem by his faithful friend and servant, the author. Royal Gardens, Kew. Dec. 1st, 1847’ (Hooker, 1847). The year was that of the opening of Kew’s Museum by the writer of this dedication and director of Kew, Sir William Hooker. Home’s gift is the third to be recorded in the Museum Entry Books and is described above (EBN 3:1847).² Home (1798-1853) was the son of Sir Everard Home, distinguished surgeon and pupil and brother-in-law of John Hunter, whose collection formed the basis of the museum of the Royal College of Surgeons. Although Home was sent away to naval college at the age of 12, his family environment was one of science and scholarship, and he was elected as Fellow of the Royal Society in 1825 at the age of 27.

After service in the West Indies, Home commanded the *North Star* during the Opium Wars in China (1841-6), and in the Flagstaff War (First Māori War) in Aotearoa New Zealand, 1845-6. In 1850 he captained HMS *Calliope*, sailing in Australian and Aotearoa New Zealand waters. He is said to have returned to the southern hemisphere ‘to mature certain philanthropic views which he entertained in reference to the races of the South Sea Islands’ (Anon., 1853). The Kew tapa pieces match two episodes recorded from his 1844 voyage in the Pacific, described by Home in the *Nautical Magazine* (Home, 1849-1850). The ship sailed from Sydney, travelling to Norfolk Island, Tongatapu (the main island of the kingdom of Tonga), the northern Tongan island of Vavaʻu, then the island of ʻUpolu in Samoa, and thence to Aotearoa New Zealand. Home was struck by the high demand from islanders for European clothing, and thus the potential for trade, and perhaps as a result paid special attention to indigenous clothing. In Tongatapu he describes:

plantations... of yams, and the paper mulberry. From the bark of the latter, taken when the stem is about three inches in diameter, the cloth is made by which both sexes are clothed; it is called tapa. After it has been soaked in water it is laid upon a log of wood formed like the wooden axletree of a large cart, the extremities of which are supported from the ground by three pieces of wood, two parallel to each other, and one across; the ends of the log are laid upon the cross pieces which raise it three or four inches from the ground; the bark is beaten by the women with an instrument made with heavy wood like a rolling pin, only it is square: the beating commences at daylight, and continues without ceasing until 3 p.m., unless they are working against time, such as a marriage or some such events: the noise is loud and musical, they keep time in beating: there are usually two or four beaters in every house at work, so that the women of Tonga make more noise than any in any place I ever visited before. The breadths are pasted together with paste made of the flour of arrow root or taro; when dried it is printed; the pattern is devised by the king’s family, principally from our cotton prints; the type or pattern is raised upon the leaf of the pandanus, and contrary to other prints the side which receives the stamp is the reverse side. King Josiah Tubo to shew what could be produced had a piece of cloth made

² References to Museum Entry Books and Entry Book Numbers (EBN) therein are to the series of accession registers held by the Economic Botany Collection at Kew.
which was two miles in length and 120 feet wide; when made it was necessary to spread it and the ground had to be cleared to spread it upon. There was a great feast of pigs and yams; when the first piece was cut off, it was all distributed (Home, 1849: 583).

On a visit to the Tu’i Tonga (sacred king, Tu’i Tonga Laufilitonga), ‘he was dressed with an enormous piece of new tapa which left little exposed below the arms, and almost covered his legs; he had no ornaments, and did not move when we entered. Mr. Thomas [Rev. John Thomas of the Methodist Missionary Society] was the interpreter. Some of the gentlemen from the ship accompanied me. A large wooden drum was brought for me to sit upon, but
I preferred the ground; the only native near him was an old woman, simply dressed, who sat by his knee. He had prepared as a present two spears, a club, a piece of cloth and a mat, being I suppose, all that is necessary for apparel, defence, and rest; he said “He knew we did not drink kava,” but asked if I would have some made, which I accepted’ (Home, 1849: 585).

Home’s donation to Kew includes a large sheet of *ngatu* (the Tongan term for tapa), measuring 540cm x 470cm and labelled, ‘Portion of a piece two miles in length and 120 ft wide, which was made for King Josiah Tubo’ (EBC 43023; Figure 17.3a), and part of a *Pandanus ‘upeti fala* (printing board, EBC 42913; Figure 17.3b), labelled ‘Used to print the pattern on Tapa cloth (example of which is included in the collection)’, and matching part of the pattern of the large sheet. These items were surely also collected in 1844, in view of the reference to this specific barkcloth and ‘upeti fala in Home’s account.

On ‘Upolu, Samoa, Home noted that ‘The women wear their tapa garment in the same way as the Mexican wears his poncho. The head is put through a hole in the centre, and the cloth hangs down before and behind. I am assured that this is the original native mode of wearing it: in grown-up persons this seldom falls below the waist. The stores of the firm established here, furnish neat and sometimes gaudy dresses, which are displayed particularly on Sundays...’ (Home, 1850: 221). Two Samoan tiputas are recorded as donations from Home (EBC 42952; 42861; Figure 17.4a), again probably collected in 1844.
A further three pieces lack donor names but can probably be assigned to Home: a roll of inner bark from ‘Upolu, dated 1844 (42884), and a board and shell for preparing bark from ‘Upolu (42887; Figure 17.4b), matching Home’s description.

**Missionary: Rev. Thomas Powell**

Thomas Powell (1809-1887) was a missionary for the London Missionary Society on Tutuila, the largest island in American Samoa, for much of the period 1845-88. He published a series of works on botany and ethnography, and donated herbarium specimens to Kew. Among several donations to the Kew Museum, the tapa pieces were donated in 1866 when Powell returned on a visit to London. 18 objects are listed in the Museum Entry Book (EBN 17:1866), incorrectly as ‘Sandwich Islands' (Hawai‘i), but in fact all from Samoa. They include an ‘Entire dress of Tapa Cloth, *Broussonetia papyrifera* and beaten bark of the same’ and ‘Frame for printing tapa cloth’, alongside sandals, seeds, oil, matting and other items.

The bark specimen does not survive, but the frame and two items of dress (both labelled as given in 1866) do. The frame (42914) is labelled ‘Made from the leaves of *Pandanus odoratissimus* used for printing Tapa cloth. The raised parts or pattern are the midribs of the leaves of the coconut palm. The whole is sewn together with coconut fibre.’ The items of *siapo* (the Samoan term for tapa) are both in the form of tiputa (EBC 42952; 42905; Figure 17.5).

**Physician and botanist: Dr William Hillebrand**

William (Wilhelm) Hillebrand (1821-1886) was deeply involved in the public affairs of Hawai‘i for 20 years. Born in Prussia, Hillebrand qualified as a doctor, practising medicine briefly in Australia and the Philippines before arriving in Honolulu in 1850. He was soon a key figure on the islands, becoming physician to the royal family and chief physician of the Queen’s Hospital. At the same time, he built on his long-standing interest in botany by collecting plants as the basis for a flora of the islands, and promoting the importation of plants and labourers to develop Hawai‘i’s agriculture (Meier, 2005).
From 1853 he developed his own botanical garden surrounding his home in Honolulu, today the Foster Botanical Garden.

The main record of Hillebrand's botanical work is his letters to William and Joseph Hooker at Kew. Many living plants were exchanged between Hillebrand and Kew, and Hillebrand also sent as complete a set as possible of his herbarium specimens. His *Flora of the Hawaiian Islands* (1888) was published posthumously and has been described as a 'classic work' and the 'first true manual' for the botany of any country within Oceania (Frodin, 2001). Hillebrand collected only a few specimens for Kew's Museum of Economic Botany. In a letter accompanying a parcel of dried specimens sent on 14 December 1861, he writes:

> in former times our natives used to prepare their cloth from various species of *Procris* [now *Pipturus albidus*] (mamake), *Neraudia* (maaloa), *Broussonetia* (wauke), and *Urtica* [Boehmeria]. I do not know, to what extent the cultivation of any plant could enter into competition with the rag trade of Continental Europe for the purpose of papermaking, but as two of those plants, the *Procris alba* and *Broussonetia* grow here in great abundance and could, without great labor or expense be multiplied almost indefinitely, I should gladly see them turned to some account for increasing the prosperity of this country. You will find a sample of wauke kapa with the plants... (Meier, 2005: 91; DC 75, 83).

This is a rare reference to the range of fibre plants used for making kapa, and an important indicator to researchers of the species beyond *Broussonetia* that were used in Hawai‘i.
The kapa was indeed received at Kew on 27 June 1862 (Catalogue Number 42964; Entry Book 69.1862). It is a large uncoloured piece, measuring 308 by 241 cm, and showing the ornate beater mark known as the pipped net pattern or ‘upena pupu (Figure 17.6). This is one of a series of elaborate beater marks typical of 19th-century kapa, as with Bloxam’s collections in part reflecting the new availability of metal tools that enabled more elaborate carving of beaters.

**Royal visitor and naval officer: Prince Alfred, Duke of Edinburgh**

Prince Alfred, Duke of Edinburgh (1844-1900) was the second son of Queen Victoria. Between 1867 and 1871 he captained HMS *Galatea* on a round-the-world voyage (McCreery, 2008; 2009; Mitchell, 2010). In June and July 1869 HMS *Galatea* visited Tahiti and Hawai‘i. During these visits Prince Alfred was given an exceptional assemblage of Pacific dress, now poorly known to scholars and the Pacific community alike, and dispersed between several museums in the United Kingdom (Curtis, 2016).

From contemporary accounts, there were two official events in Tahiti during which Prince Alfred most likely received gifts. On June 22nd, there was a ‘grand demonstration, on the part of the native population’ at the palace of Queen Pōmare IV (‘Aimata Pōmare IV Vahine-o-Punuatera’itua) with the ‘most influential chiefs and representatives of the people of the island assembled’ (Anon., 1869a; Anon., 1869b; Anon., 1869c). During the ceremony, the queen sat on a throne with Prince Alfred on her right and the French Governor on her left, while ‘the natives’ walked past paying ‘homage’ to Prince Alfred and the Queen (Anon., 1869b; Anon., 1869c). ‘According to the custom of the country’ the chiefs ‘divested themselves of their mantle, head dresses, and jewelry, and presented them as offerings of goodwill and friendship to the Duke’ (Anon., 1869b; Anon., 1869c). During this event Prince Alfred wore a tiputa elaborately decorated with trimmings that ‘twisted and hung over the shoulders,’ and would have been one of the seven tiputas donated to Kew in 1874. The second presentation occurred on the last Thursday of Prince Alfred’s visit; although no tapa was explicitly mentioned, Tahitians came to the palace and gave Prince Alfred ‘various offerings, which, according to the native usage, consisted of cocoanuts, bananas, poultry, and suckling pigs!’ (Anon., 1869a). Prince Alfred was also given objects, possibly including tapa, while visiting the Brander family, relatives of Queen Pomare IV (Krizancic, 2009: 160).

In Hawai‘i Prince Alfred was received by King Kamehameha V. During his stay, native Hawaiians paid him ho‘okupu, an already ‘old fashioned […] custom of paying tribute by the presentation of gifts’ (Taylor, 1922: 99). They came to the residence he had been provided in ‘the number of several thousands at a time’ and each presented him with a small gift (Anon., 1869d; Bennett, 1869: 65). The Hawaiian people gave Prince Alfred fruits, vegetables, animals such as pigs and fowl, necklaces, 12 bullocks, and ‘native mats’, which were probably barkcloth pieces (Bennett, 1869: 65; Taylor, 1922: 99). These gifts of tapa, in both countries, form part of a wider Pacific practice of symbolic gift exchanges intended to build and cement relationships (Thomas, 1991). On arrival in London in 1871, Prince Alfred’s Pacific gifts became subject to further elements of
display and gift. 784 objects, including 19 from Hawai‘i and Tahiti, were exhibited at the South Kensington Museum (now the Victoria and Albert Museum) under the title ‘Five-years’ cruise round the world’. At the close of the exhibition ‘a Collection of Vegetable Tissues and Fibres, acquired during the Voyages of His Royal Highness’ was offered to Kew (MacLeod, 1874). Of about 77 head-dresses and tapa clothing transferred to Kew, 12 remain in the Economic Botany Collection. The remaining pieces were distributed as ‘duplicates’ to other museums, either as part of Kew’s extensive distributions (more than 60,000 economic botany specimens) during the period 1847-1914 (Cornish and Driver, 2019), or in the mass dispersal of c. 2500 ethnographic objects to the British Museum, Pitt Rivers Museum and Horniman Museum that took place in 1959-1961. The earlier recipients include the National Museum of Scotland and Warrington Museum; the current location of about 50 pieces is still unknown.

The importance of the Galatea collection is two-fold: first, the depth of documentation from memoirs and newspaper accounts detailing the circumstances of gifting, and second, the precision of their time and place of acquisition, although this was obscured when the collection was accessioned at Kew as being entirely from the Sandwich Islands (Hawai‘i). The explicitly royal and chiefly nature of the Tahiti presentations is visible in the highly ornate decoration on some of the tiputas (EBC 73229; Figure 17.7a). Although manufactured, woven cloth had replaced tapa for everyday dress by 1869, tapa was still being worn by upper class women due to the Queen’s preference for native materials rather than European ball gowns. Clothing is a visible way of marking identity and political allegiance, and Tahitian queens had a history of utilising tapa and European dress to make points about political power. Queen Pomare IV insisted on wearing tapa and only speaking Tahitian, in order to communicate her dislike of the harsh and oppressive French colonial rule (Hort, 1891; D’Alleva, 2005). Among these gifts are simple tiputas (EBC 42947; Figure 17.7b).

Far fewer objects were acquired in Hawai‘i. Three kapa moe (bed covers) at Kew are, in their overall form, comparable to others, but have a thin, almost paper-like texture and glossy surface (EBC 42967; Figure 17.7c). One bears a label ‘Tapa from imported Mulberry tree, Honolulu’. The relatively late date of this kapa – which does not bear any signs of use, so may have been made shortly before the Prince’s visit – raises the possibility that both the raw material and the manufacturing techniques may have changed in response to external influences. Brigham (1911: 3) noted that ‘When in 1864 the writer came to these islands kapa was worn only in the outlying districts, and only the plainer forms were made… In 1890, when the Bishop Museum was opened, the manufacture and use (with such exceptions as we shall find later) had ceased’. The Galatea collections of 1869 thus represent the final stages of kapa making as a widespread phenomenon in the islands.

**Naturalists on board HMS Herald: William Grant Milne and Berthold Seemann**

The Royal Navy ship HMS Herald surveyed the South Pacific between 1852 and 1861, under the command of Sir Henry Mangles Denham. The ship’s botanists were John MacGillivray (dismissed from the ship in 1855) and William Grant Milne (1829-1866). Milne trained as a gardener at the Royal Botanic Garden, Edinburgh. He kept an extensive correspondence
with Sir William Hooker during the voyage, resigning as botanist in 1856 in a dispute over the quality of his specimens (David, 1995: 311-312).

Milne wrote to Kew on 4 December 1855, describing how on the island of Bau, Fiji, ‘[I] obtained specimens of this cloth in all its stages’ (DC 74, 320), the stages being:

1st stage of native cloth. The bark is taken from the tree, soaked in water for a short time, and then slightly beaten out. When a portion is thus prepared they go on with the 2nd stage, which makes head pieces for the chiefs. The native name of the cloth is ‘Mossee’, it is all made by women, and will not stand washing or rain. 2nd stage of

Figure 17.8. Two of four stages of *mosi ni sala* (head-dress barkcloth) making collected on the island of Bau, Fiji, by William Grant Milne on HMS *Herald*, 1855. Upper: Stage 1, separated inner bark; Lower: Stage 2, beaten bark (both Kew, EBC 42882). Stage 3 is missing; Stage 4, not shown, is a complete head-dress (Kew, EBC 42882).
native cloth which they call head pieces for the chiefs; not for common men. 3rd stage of native cloth (a good specimen). This is used for wearing round the waist by men, women and children. I. of Augeau (Gau). 4th stage of native cloth (a good specimen). Dyed or printed. I. of Augeau. (EBN 83: 1855).

The samples (42882; Figure 17.8) are of the extracted inner bark, and the bark after its first beating into long narrow strips. Two examples of completed head-dresses (masi isala, 42876) are the ‘4th stage’; the third stage does not survive in the Economic Botany Collection. Other items from Milne include a specimen of dyed Broussonetia papyrifera bark labelled ‘Dyed with a species of Turmeric’ from Ovalau Island, Fiji (42842), and three tapa beaters (42907) labelled ‘Made from the wood of Casuarina equisetifolia, used by the women of Nakaki’.

Milne also sent two examples of “Sigue”, part of a woman’s dress made of Mossee or native cloth. The strings are made of bark of Broussonetia papyrifera dyed red. Made by women. I. of Ovalau.’ One example, ‘dyed different colours’ is ‘used by chiefs only.’ It was transferred to the British Museum in 1960 and might be the object catalogued there as Oc1960,11.69.

HMS Herald had previously surveyed the west coast of North America and parts of the Pacific and southeast Asia, in the years 1847-1851 under the command of Sir Henry Kellett. On this voyage Berthold Seemann (1825-1871), a Kew-trained botanist, was one of three ship’s naturalists. Kew holds one piece of kapa collected by him, collected when the ship stopped in Honolulu from 14-30 October 1850 (EBC 43736). This large undecorated sheet measures 260 by 198 cm and is a rare example of kapa made from māmakī (Pipturus albidus).

Conclusions
Re-evaluation of the Kew tapa collection has enabled specimens to be reconnected to collectors, locations and dates. The pattern of collecting reinforces previous appreciation of the highly diverse routes through which Kew’s collections arrived. Also of interest is the tendency to collect in ‘illustrative series’, thus including raw materials and tools, from the earliest collections of 1844, as well as in later periods when this had become firmly established as a form of museum display.

However, the greatest significance of improved documentation is the collection’s enhanced utility as a record of past tapa traditions, and as a potential resource for the revival of lost practices. Not only are these mostly well-dated collections, but in some cases there are lengthy eye-witness accounts of the moment of acquisition. The value of the objects is enhanced by the dye and fibre analyses carried out as part of the Situating Pacific Barkcloth project (Flowers, Smith and Brunton, 2019; Smith, Holmes-Smith and Lennard, 2019). We have not described here the tapa pieces made by Pitcairn islanders and which have been visited at Kew, and studied by Pauline Reynolds (2012), a descendant of one of the makers (Chapter 14). The enhanced documentation of the Kew barkcloth collection will surely support many more similar interactions between Kew collections and the source communities from which they came up to 200 years ago.

Acknowledgements
We are grateful to Sharon Steadman, whose 2002 internship report on Kew’s tapa collection has formed the basis of further work. Curtis’s work formed part of her Museum Studies MA dissertation at the Institute of Archaeology, University College London, co-supervised by Rodney Harrison.