

## **RESTORATION OF A GRANTS AND LEASES REGISTER IN THE STATE LIBRARY OF N.S.W.**

by T. F. Nielsen

The following article describes the procedures adopted in restoring a Grants and Leases Register (3c) in the Conservation Laboratory and Workshop of the State Library of New South Wales. The volume in question, being a "State archive" in the terms of Section 2 of the N.S.W. Archives Act, 1960, is under the care of the Archives Authority of that State and deposited in the Archives Office. The volume covers the period February 1800 to April 1809.

The register was in a state of advanced deterioration when its restoration was entrusted to the Workshop. All pages had come loose from the spine and covers, most pages were torn and broken up into pieces both large and small, and in some cases 75% of a page was missing.

The whole volume was infested with mould and had been considerably damaged on all edges by insects; multi-coloured mould marks, live mould spores, and some dried insect parts were found throughout the volume: because of these evidences the volume was fumigated, using a 50/50 mixture of thymol and paradichlor-benzol crystals, before any other work was carried out.

Fumigation and airing completed, the whole volume was brushed, page by page, in an effort to remove as much of the dead and dried mould and insect matter as possible. The volume was then sorted out, the pages stacked in numerical order, and loose page pieces placed in separate envelopes according to their separate page numbers.

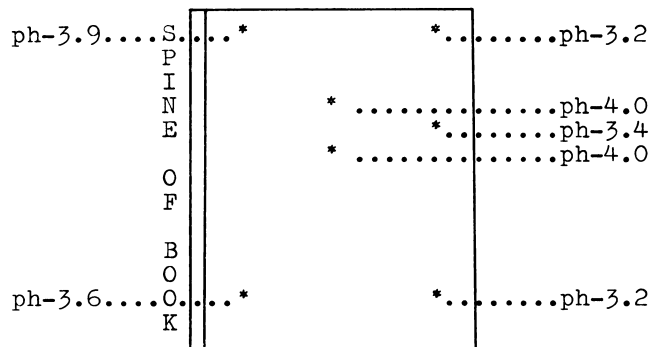
The restoration work carried out on this register was used for instructional purposes. A manuscript restorer, Ms L. S. Johnston, had not previously been involved in this type of work. The job, however, progressed very well, over a period of two months, and the manuscript restorer gained an increasing amount of skill and confidence, and the quality of the work was high.

The register was handwritten, and several different inks had been used to complete it. Solubility tests carried out on these inks showed as follows:

- Red ink: soluble in water,
- Black ink: slightly soluble in acetone,
- Brown ink: soluble in water.

Because the above-mentioned red and brown inks (mainly used for notations) were highly soluble in water, they were fixed with a 5% solution of soluble nylon in alcohol.

All pages, including the covers, were acid. The pH readings carried out with a Beckman "Chem-Mate" meter and a combination 38507 Beckman electrode showed the following average pH readings:



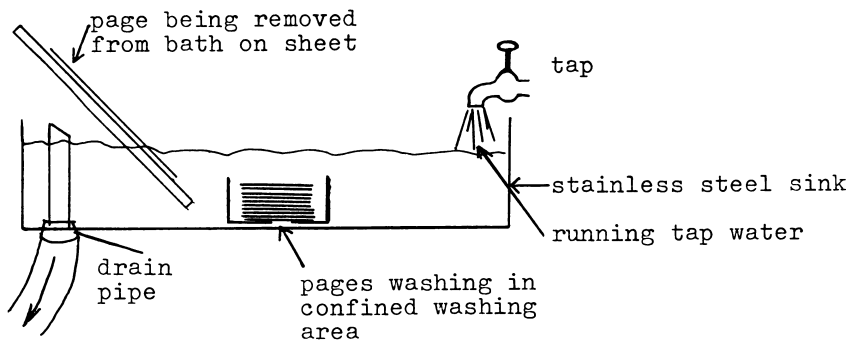
It was decided that the following restoration work was to be carried out:

1. *Surface cleaning with rubber, etc.*

Surface cleaning was first carried out with an opaline dry-cleaning bag, but was not very successful and in due course was discontinued, as the abrasive action caused most ink to flake.

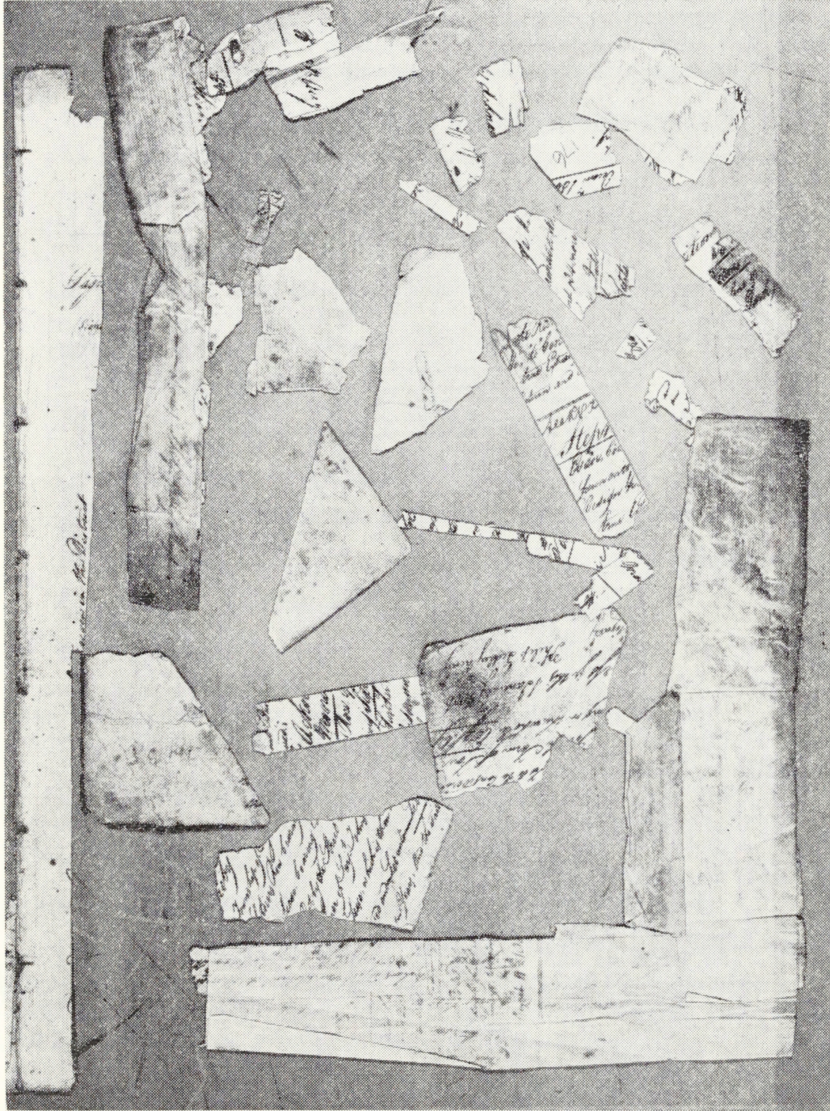
2. *Washing in water to remove water soluble dirt and acid*

All pages were washed in running warm and cold water for a period of 1½ - 2 hours. This removed a very considerable amount of yellowing and acid but not the writing. The average pH reading of washed pages was 6.1. Extreme care had to be taken during the washing process, and especially when removing the very fragile pages from the water-bath. They were removed by the method illustrated below.



3. *Removing odd stains with solvents*

It was found that some of these stains could be removed easily with alcohol acetone and by using a weak solution of chloramine-t (2.5%). Bleach could not, however, be used on stains where there was also writing on the page.



Scraps of various pages of the Register before restoration.

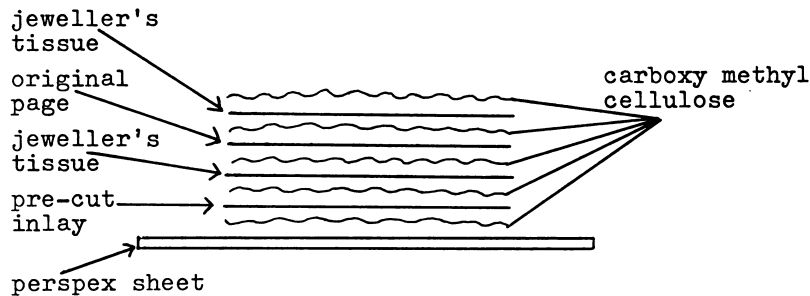
#### 4. Sizing the paper

Our usual practice at this stage was to size the paper with a solution of gelatine or something similar. We decided, however, in this instance, to attack the problems of sizing, repairs and inlay as one operation, due to the very fragile condition of the paper. It was carried out in the following way:

(a) carboxy methyl cellulose (CMC) clear, pH 7.2 was used as size and adhesive;

(b) white cartridge paper, of the same thickness as the original page, was used as inlay-paper (the inside measurement of the inlay was  $\frac{1}{8}$ ", or approximately 3 mm, less all round than the page to be repaired);

(c) jeweller's acid-free tissues were used as repair tissues.



The above drawing shows the method of sizing, repair and inlay used. The following notes are supplied to assist the reader to understand the process.

1. CMC was spread with a brush on the perspex sheet.
2. The pre-cut inlay was wetted and placed on the perspex, it was flattened with a brush, air bubbles were pressed out, and a thin layer of CMC was spread on top.
3. A sheet of jeweller's tissue was laid on top, flattened with a brush, and a thin layer of CMC spread on top.
4. The page of the original was wetted, placed on top of the "sandwich" in the cut out middle of the inlay (making sure that the edges of the original overlapped the edges of the inlay by approximately 3 mm all round) flattened with a brush to remove air bubbles, and left overnight to dry.
5. Next day the "sandwich" was peeled off from the perspex and any cutting down that had to be done was carried out by the bookbinder.

Whereas His Most Excellent Majesty, King George the Third by a Commission under the Great Seal of Great Britain, by His Majesty's Royal Sign Manual bearing Date respectively the Eleventh Day of November in the Ninety first Year of His Majesty's Reign hath been graciously Pleas'd to Give and Grant full Power and Authority to the Governour (in case of his Death or Absence the Parliament Governour) for the time being of His Majesty's Territory of the Western Part of New South Wales & the Islands therunto Appoynted by an Instrument or Instruments in Writing under the Seal of the Government of the said Territory or as to or they respectively shall think fit and convenient for His Majesty's Service to Permit either Absolutely or Conditionally the whole or any part of the Term or Time for which Persons Convicted of Felony Misdemeanors or other Offences amenable to the Laws of Great Britain shall have been or shall hereafter be respectively Imprison'd or Transported to New South Wales or to the Islands therunto as aforesaid

By Virtue of such Power and Authority so vested as aforesaid I John Hunter Esquire Captain General and Governour in Chief in and over the said Territory of New South Wales & the Dependencies & in consequence of the faithful & most discharge of the Trust reposed in John Grant as Clerk to the County Committee and as Collector of the Revenue and at Request and Invitation of the Officers composing the said Committee agreeable to following Minutes entered in their Proceedings "We whose Names and Names subscribed appointed a Committee for superintending the working of a County Gaol, having taken into Consideration the good Conduct & the services rendered to the Publick by John Grant for his assiduity in collecting the Money due for the above necessary purposes do recommend him to His Excellency Governour Hunter as a Person deserving an Absolute Emancipation, which we wish of His Excellency as our joint request to Mr. Balmain John McArthur, Richard Johnson, & Thomas" do hereby in compliance with the above request Absolutely Permit the remainder of the Term or Time which is yet unexpired of the Original Sentence or Order of Transportation upon the said John Grant in the Year One thousand seven hundred and Ninety three

Given under my Hand and the Seal of the Territory at Sydney in New South Wales this Tenth Day of June in the Year of our said 1800

(Sig. 22) J. Hunter

A page of the Register after restoration.