

UNITED STATES PATENT OFFICE.

FRANCIS W. R. EMERY, OF TAUNTON, MASSACHUSETTS.

PROCESS OF PRESERVING RECORDS.

SPECIFICATION forming part of Letters Patent No. 561,503, dated June 2, 1896.

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To all whom it may concern:

Be it known that I, FRANCIS WALCOTT REED EMERY, a citizen of the United States, and a resident of Taunton, in the county of Bristol and State of Massachusetts, have invented an Improvement in Processes of Preserving Records, of which the following is a specification.

My invention relates to a process by which writing is excluded from the air and keeps the same from fading or the paper from decay.

My invention also relates to a process by which old and decayed records or documents can be preserved and safely handled after their treatment, however decayed they may be, and they may be used like new paper without fear of injury, thus preserving to future generations invaluable original records or papers. This I set forth as an advantage derived by my invention.

My improved process consists in lining the sheets of records on both sides or one side completely with silk or tissue-paper by means of a preservative paste, which may be made from rye-flour or wheat-flour mixed with a small proportion of glycerin to keep the same soft and pliable. After lining and drying the sheets I moisten and thoroughly press them between sheets of paraffin-paper and pulp-board to insure adhesion and smoothness of parts. The sheets are then treated to a coat of paraffin in two ways: first, when the writing is faint and not liable to spread in treatment I cut paraffin in benzene in a water or steam bath at low heat and apply it to the sheets with sponge or brush, which perfectly seals the writing, so as to overcome any fear of fading, arrest further decay of paper, render the same transparent, and keep all insects and rats or mice from same, as no animal or insect will eat paraffin; second, by rubbing the document after lining with a block of paraffin cold, until the silk or paper is filled with paraffin, this sealing, covering, or lining only and keeping document from air.

To carry my invention into effect, I proceed in the following manner: The book, record, or document to be preserved is first cleaned of all dust or foreign matter that will have tendency to prevent adhesion of lining when preservative paste is used. I then carefully match parts of a sheet together on oil-

cloth or soapstone surface which has been previously moistened to prevent displacement. Then I cover the entire surface of one side of the sheet with thin paste applied with a brush. The paste is made in the following manner: Rye or wheat flour and water are thoroughly cooked with a small per cent. of alum. After cooking and while warm I add a tablespoonful of glycerin to a quart of paste to render the sheet pliable and soft. The leaves of the book, record, or document are now ready for receiving the lining of silk or tissue-paper which covers the same throughout or completely covers the sheet on top side that has been first pasted, as stated above. Then the lining with sheet now covered or lined on one side is carefully removed from surface. The surface is again moistened, the sheet under treatment reversed and lined in same way and manner as the other side, thereby completely covering both sides of the sheets of the book, record, or document with lining of silk or tissue-paper. Then I lightly press the same to exclude air and insure adhesion. This is done between two sheets of paraffin-paper. Next, I thoroughly dry, then moisten, and then press the sheets. The sheets are now ready for sealing or coating with paraffin, which is performed in either of the two following manners: First, when the writing is heavy and dark of creosote-ink, to prevent spreading of ink during process of sealing I place the sheet on warm soapstone-surface and rub the same on both sides with a block of paraffin until the silk or tissue-paper is filled with paraffin, thus completely sealing the same from air and also preventing any animal or insect from even injuring the same, as no animal or insect will eat or touch paraffin, thus adding another safeguard to the document treated by my process. When the ink is ordinary, as in most cases, the paraffin is applied in the following manner: by cutting or melting the paraffin in benzene in a hot-water bath, then applying with a sponge or brush to document, allowing the same to penetrate the entire sheet, thereby sealing same from air, as set forth in foregoing treatment when paraffin is used cold.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. The process herein described for preserving books, records, and documents which consists in placing a sheet on a previously-moistened surface, then placing on the sheet
5 a film of preservative paste, then applying a covering of silk or tissue-paper, and then removing the sheet from the surface substantially as described.

2. The process herein described for preserving books, records, and documents which consists in matching the parts of a sheet together on a previously-moistened surface to prevent displacement of the parts, then placing
10 on the sheet a film of preservative paste, then applying a covering of silk or tissue-paper, then removing the sheet from the surface then remoistening the surface and then reversing the sheet and replacing it on the
15 surface and treating the other side of the sheet in a similar manner; substantially as described.

3. The process herein described for preserving books, records, and documents, which consists in placing a sheet on a previously-moistened surface, then placing on the sheet
20 a film of preservative paste, then applying a covering of silk or tissue-paper, then removing the sheet from the surface, then remoistening the surface, then reversing the sheet

and replacing it on the surface and treating 30
the other side of the sheet in a similar manner, then removing the sheet then lightly pressing the sheet between two sheets of paraffin-paper, next thoroughly drying, moistening and pressing the sheet and then placing 35
the sheet on a warm surface rubbing it on both sides with a block of paraffin, until the silk or tissue-paper is filled with paraffin thus completely sealing it; substantially as described. 40

4. The process herein described for preserving books, records, and documents, which consists in placing a sheet on a previously-moistened surface, then placing on the sheet
45 a film of preservative paste, then applying a covering of silk or tissue-paper, then removing the sheet from the surface, then remoistening the surface, then reversing the sheet and replacing it on the surface, and treating
50 the other side of the sheet in a similar manner, then cutting and melting paraffin in benzene in a hot-water bath, and then applying the paraffin to the sheet; substantially as described.

F. W. R. EMERY.

Witnesses:

GIDEON PERKINS,
EDWARD J. MURPHY.