

How they made sure India's Constitution lasts for ages

The Original Copies Are Calligraphed And Intricately Adorned. Indian Scientists Collaborated With US Experts To Preserve The Documents

Vishwa.Mohan
@timesgroup.com



Republic Day marks the occasion when the Constitution of India came into force. This year, we commemorated the 75th anniversary of the day on which the arduous efforts of the founding fathers of a newly independent India reached a momentous conclusion. The Constitution though was adopted by the Constituent Assembly, the body that drafted it, on November 26, 1949. The outcome of over two years' labour was presented in the form of two carefully calligraphed copies bearing the signatures of the doyens of the freedom movement. But where are those volumes?

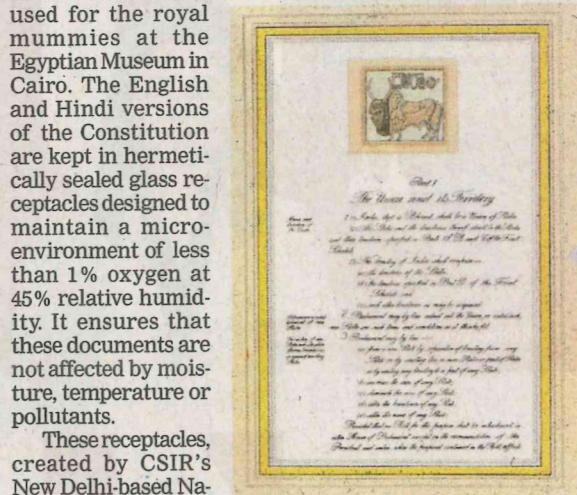
The original calligraphed copies of the Constitution of India are, in fact, preserved inside the Parliament Library in display cases that are quite similar to the ones used for the royal mummies at the Egyptian Museum in Cairo. The English and Hindi versions of the Constitution are kept in hermetically sealed glass receptacles designed to maintain a micro-environment of less than 1% oxygen at 45% relative humidity. It ensures that these documents are not affected by moisture, temperature or pollutants.

These receptacles, created by CSIR's New Delhi-based National Physical Laboratory (NPL) in collaboration with the Getty Conservation Institute (GCI) of US, are housed since 1994 in a strong room in Parliament Library.

The two receptacles are inside a protective vault-like room — 180cm wide, 180cm deep, and 305cm high — in the Parliament Library. The room is climate-controlled to maintain a temperature of 20 degrees Celsius and 30% relative humidity throughout the year. Each box is 55cm wide, 70cm long, and 25cm high. "These receptacles are periodically evaluated by a team of NPL scientists while the Parliament Library monitors them on a

weekly basis. Both copies are in very good condition and the monitoring parameters are adequately maintained," Venugopal Achanta, director, CSIR-NPL, told TOI.

The two original calligraphed copies have great autographic and historical value as they contain the signatures of the founding fathers of the Con-



stitution. Initially they were kept in the Parliament Library like any other important document. But in the mid-1980s it was felt that these historic volumes needed to be preserved better. That was when NPL entered the scene. Its task was to build cases for preserving these documents.

Fabricated in 1988-89 using tempered glass and appropriate sealants, the NPL cases, however, were not deemed suitable due to durability issues. Chronicling the subsequent efforts in the journal *Current Science*, executive director of NPL, D K Aswal, and its former chief scientist

ILLUSTRATED CHARTER OF INDIA

The original English version of the Constitution of India was calligraphed by Prem Behari Narain Raizada

It weighs about 13kg and has 221 calligraphed sheets of handmade parchment paper

The sheets were decorated and illustrated by Nandalal Bose

The pages depict India's journey from the Harappa-Mohenjo Daro and Vedic periods to the freedom movement

The Hindi version was calligraphed by Basantrao Vaidya

It weighs about 14kg and comprises 252 calligraphed sheets

Both versions have been bound in Morocco leather and embossed in gold

Source: *Current Science*

BINDING COMMITMENT:

Indian officials (top) pose with experts who helped create the climate-controlled boxes for keeping the original copies of the Constitution, which are now housed in Parliament Library

Ranjana Mehrotra note how they sought to collaborate with various national and international institutions to develop the hermetically sealed glass cases.

In 1989, NPL scientists finally landed at the door of GCI, which had developed "nearly similar cases for the storage and display" of the Egyptian Museum mummies. NPL and GCI signed an agreement in July 1993 for the creation of the display cases for the Constitution of India. It was agreed that two identical cases would be fabricated for the English and Hindi versions of the Constitution. The receptacles were built by GCI in the US and shipped to the Parliament Library. They were installed in March 1994.

"As those boxes are aging, the proposal to build new ones should be taken up at the earliest," Aswal, posted as director, Health Safety and Environment Group, Bhabha Atomic Research Centre (BARC), told TOI.