

Artificial snow to combat sea-level rise

Scientists seeking to avoid sea-level rise from the melting West Antarctic ice sheet have come up with a controversial solution: use snow cannons to pump trillions of tonnes of ice back on top. Experts at the Potsdam Institute for Climate Impact Research in Germany said the plan was currently only a hypothesis. AFF



Friendly robots spruce up Singapore's buildings

Hundreds of "friendly" robots languages and sing are being rolled out across Singapore, to help clean the city-state's hotels, shopping malls and government buildings. They scrub and mop autonomously and can even entertain by rapping in English. AFP



'Christ of Theft' statue poses dilemma for Peru

A giant statue of Jesus Christ that looms over Lima is causing controversy in Peru because of its financing by the graft-tainted Brazilian construction giant Odebrecht and late ex-president Alan Garcia. Thousands are demanding its removal saying the concrete structure, which cost \$800,000, is a symbol of corruption. AFP

Bengal's stately Raj Bhavans tell their stories in new book

They bore witness to many landmark events during British rule in India

SHIV SAHAY SINGH

In a large room in the south of the Raj Bhavan in Kolkata, an oil painting of the Mahatma by Jamini Ray hangs in the Governor's study. Not many people know that some of the policies that shaped colonial India - the introduction of English education through Thomas Macaulay's Minute, the Doctrine of Lapse, the Ilbert Bill, the Partition of Bengal, and many others - were chalked out in this very room.

In the words of Lord Curzon, the room "has witnessed discussions as agitated and decisions as heavily charged with fate as any private apartment in the wide circumference of the British Empire".

Several anecdotes about the Raj Bhavan, Kolkata the stately building that remained the seat of power for the entire subcontinent from 1803 to 1912 – have been the documented in a book titled Those Noble Edifices: The Raj Bhavans of Bengal. The publication was unveiled by West Bengal Governor Keshari Nath Tripathi here on Thursday.

In its foreword, Mr. Tripathi says, "We wanted to share these 'secrets' and inside stories of Kolkata's most hallowed precincts with the

Jayanta Sengupta, secretary and curator of Victoria Memorial Hall, who has written the book, described it as an attempt to "lift this shroud of mystery and show what lies beneath, what the Raj Bhavan really means as a residence to its exalted overlords as well as to its humbler inmates and workers".

Mr. Sengupta also shares stories of the Raj Bhavans at





Standing tall: The Raj Bhavans in Kolkata and, below, in Barrackpore. • VICTORIA MEMORIAL HALL

It is an attempt to lift the shroud of mystery and show what lies beneath

JAYANTA SENGUPTA

Barrackpore and Darjeeling. Full of maps, archival photographs, letters and manuscripts, the 200-page publication also refers to older buildings where the Governor General and officials of the East India company lived, for instance, the Old Fort located between the Ganga and today's BBD Bagh Dalhousie Square).

The cost of building the Raj Bhavan, Kolkata, was then estimated at between £170,000 and £180,000, at Barrackpore not far from where the "disturbances" broke out.

Mr. Sengupta said that although the Government House at Barrackpore was a mere shadow of what Wellesley's grand and ambitious plan could have produced, it was still spacious enough to serve as a country residence for Governor-Generals and Viceroys.

After Independence, the Raj Bhavan at Barrackpore came under the care of the West Bengal Police, housing the police training academy. Now the academy has been shifted to another site and the building restored. The building now houses a museum.

The third important structure the book discusses is the Raj Bhavan in Darjeeling that came up on what was not part of the conquered territory of the British.

After the introduction of tea to Darjeeling in the early 1840s and the British negotiating treaties with both Sikkim and Bhutan in the 1860s, Darjeeling became a part of British India in 1866.

By the 1870s, Darjeeling became the summer seat of the Bengal Government and a suitable accommodation for the Lieutenant-Governor was built in the late 19th century. Unlike the Raj Bhavan at Kolkata, which was built without a garden, the Raj Bhavan at Darjeeling has always had one.

"The main house was so extensively damaged by the Nepal-Bihar earthquake of January 1934 that it had to be entirely demolished, and replaced by a new Government House built in ferroconcrete during the tenure of Sir John Anderson (1932-37)," Mr. Sengupta writes.

Chennai techie finds a bug in Instagram, wins \$30,000

The flaw, now fixed, could have been exploited by hackers

INDO-ASIAN NEWS SERVICE NEW DELHI

Chennai-based security researcher Laxman Muthiyah has won \$30,000 as a part of a bug bounty programme after he spotted a flaw in Facebook-owned photo-sharing app Instagram.

Mr. Muthiyah said the vulnerability allowed him to to "hack Instagram any account".

He discovered it was possible to take over someone's Instagram account by triggering a password reset, requesting a recovery code, or quickly trying out possible



Laxman Muthivah

recovery codes against the account

"I reported the vulnerability to the Facebook security team and they were unable to reproduce it initially due to lack of information in my report. After a few emails

and proof of concept video, I could convince them the attack is feasible," Mr. Muthiyah wrote in a blog post.

Facebook and Instagram security teams fixed the issue and rewarded him \$30,000.

Mr. Muthiyah has earlier identified not only a data deletion flaw, but also a data disclosure bug on Facebook.

The first bug could have deleted a user's photos and the second could have tricked a Facebook user into installing a mobile phone app that could go through all the user's pictures.

Turtle with 2 heads born in Malaysia

Survives only a few days after being discovered

AGENCE FRANCE-PRESSE

A two-headed turtle has been born in Malaysia, but it only survived a few days after being discovered.

It was found on Monday on Mabul island, off the Malaysian part of Borneo, in a nest alongside more than 90 other recently hatched green turtles.

David McCann, marine biologist and conservation manager for group SJ SEAS - which oversees the nesting site – said the creature was "utterly fascinating".

"The right head seems to control the front right flipper, and the left head the front left flipper. Yet they are capable of coordinating their movements in order to walk and swim," he said.

SJ SEAS chairman Mohamad Khairuddin Riman added, "We have released around 13,000 hatchlings



Short life: The baby turtle at the Mabul Turtle Hatchery on the island of Borneo. • AFP/SCUBA JUNKIE S.E.A.S

from the hatchery and have never seen anything like this before.'

But the turtle died late on Wednesday, said Sen Nathan, a vet from Sabah Wildlife Department.

He said the cause of death was not yet known but added the turtle would have had little chance of surviving long in the wild.

"It would have been poached by an eagle because it could not swim well," he said. While rare, it was not the

first time a two-headed baby turtle has been found. Mr. Nathan said one was discovered in 2014, on an is-

land off Malaysia's east coast, which survived for three months. Green turtles are one of

the largest sea turtles, and are mainly found in tropical and subtropical waters.

⁺ Punjab prison cell where Nehru was lodged in 1923 collapses

The structure could not withstand incessant rain

A prison cell in Jaitu town of Puniab's Faridkot district where Jawaharlal Nehru and two other Congress leaders were lodged in 1923 has collapsed due to incessant rains, a senior police official said on Thursday.

During the Independence movement, Nehru and his colleagues were briefly lodged there for violating prohibitory orders banning their entry into the then princely state of Nabha.

One wall and the roof of the 240 sq.ft. jail room in which Nehru, K. Santhanam and A.T. Gidwani were kept on September 22, 1923, collapsed on Wednesday following heavy rains, Faridkot Senior Superintendent of Police (SSP) Rajbachan Singh Sandhu said.



Jawaharlal Nehru

Nehru along with the two Congress leaders had arrived at Jaitu to participate in 'Jaitu Ka Morcha' launched by the Akalis against the

The SSP said the room had not been preserved and nothing had been to maintain it for several years.

Nehru had come to Jaitu after a resolution was passed in a Congress session in 1923 supporting the rally. Nehru along with the two Congress

leaders were sent by the par ty to get information on political developments.

After remaining in the cell for a day, the leaders were shifted to Nabha jail after the court handed them a twoyear jail term on October 3.

During his Punjab visit in 2008, Congress leader Rahul Gandhi had visited the

The cell is adjacent to the Jaitu Police Station.

Punjab Congress general secretary Pawan Goyal said the then Congress government at the Centre had sanctioned ₹65 lakh for the maintenance of the cell.

"The State tourism department had taken the jail room for its maintenance for the past 10 years, but nothing has been done to develop it as a tourist destina-

River of light

which angered the East India

Company's Board of Direc-

In fact, Lord Wellesley

had similar plans of making

another Raj Bhavan at Bar-

rackpore, but the plans were

rejected by the Board of Go-

vernors of the East India

The new book includes refe-

rences to documents such as

a note dated April 1, 1857, in

Governor-General Lord Can-

ning's own handwriting re-

garding the outbreak of the

"disturbance" (the Revolt of

1857) at Barrackpore on the

occasion of the disbandment

It is believed that Lord

Canning's note was written

of the 19th Native Infantry.

Company.

Rare documents



Let it shine: Four London bridges are illuminated in the first phase of a £45 million project to create the longest artwork in the world at Tower Bridge on Wednesday. The LED displays, created by U.S. artist Leo Villareal, will be rolled out to include 15 bridges on the Thames, creating the 'Illuminated River' project. • CHRIS J RATCLIFFE/GETTY IMAGES

U.S. senator seeks probe into FaceApp

AGENCE FRANCE-PRESSE

The chart-topping Russianmade FaceApp, which allows users to see how they will look as they age, is in the eye of a political storm in the U.S., with one senator urging an FBI investigation into its "national security and privacy risks".

A celebrity favourite. the app deploys artificial intelligence to modify users' photos, adding wrinkles or subtracting years from their faces.

On Wednesday, U.S. Se-Minority Leader Chuck Schumer sounded the alarm over FaceApp's Russian developer, calling for the FBI and the Federal Trade Commission to "look into the national security & privacy risks" connected to the application.

FaceApp is the most downloaded free app on Google Play.

7,000 species added to IUCN 'Red List' Oral health given short shrift, says study

Habitat destruction and hunting by humans are reasons for fall in numbers

AGENCE FRANCE-PRESSE

Mankind's destruction of nature is driving species to the brink of extinction at an "unprecedented" rate, the International Union for the Conservation of Nature (IUCN) warned on Thursday, as it added more than 7,000 animals, fish and plants to its

endangered "Red List". The group has now assessed more than 1,05,000 species worldwide, around 28,000 of which risk extinc-

While each group of organisms face specific threats, human behaviour, including overfishing and deforestation, was the biggest driver

of plummeting populations. "Nature is declining at rates unprecedented in hu-



monkey with her baby in a zoo in France. • AFP

man history," said IUCN acting director general Grethel Aguilar. "We must wake up to the fact that conserving nature's diversity is in our

Wedgefishes and giant

guitarfishes, known collectively as Rhino Rays due to their elongated snouts, are now the most imperilled marine families on Earth. The False Shark Ray is on

the brink of extinction after

overfishing in the waters off of Mauritania saw its population collapse by 80% in the last 45 years.

Seven species of primate are closer to extinction on the new list, including the Roloway Monkey of Cote d'Ivoire and Ghana, with fewer than 2,000 individuals left in the wild.

Prime culprits are humans hunting the animals for bushmeat and "severe habitat loss" as forest is converted to land to grow food. More than 500 deep-sea

bony fish and molluscs have been added to the list for the first time posing something of a conservation conundrum as the space they inhabit - 1,000 metres beneath the surface – is often beyond national boundaries.

Situation is the most bleak in low-income countries, says *Lancet* report SPECIAL CORRESPONDENT wider health care system. The Lancet Series on Oral

"Oral diseases present a major global public health burden, affecting 3.5 billion people worldwide, yet oral health has been largely ignored by the global health community," noted a new Lancet Series on Oral Health.

The report warns that with a treat-over-prevent model, modern dentistry has failed to combat the global challenge of oral diseases.

Oral diseases, including tooth decay, gum disease and oral cancers, affect almost half of the global population, with untreated dental decay the most common health condition worldwide. In India, oral disorders are



can prevent gum disease.

the most prevalent disease condition, and have remained so for the past 30

Prevalence of oral cancer is highest in South Asian countries.

In addition to lower quality of life, oral diseases have a

Economic impact

major economic impact on

both individuals and the

technology-focused trapped in a treatment-overprevention cycle, failing to tackle the underlying causes of oral diseases. In middle-income coun-

Health, led by University

College London (UCL) re-

searchers, brought together

13 academic and clinical ex-

perts from 10 countries to

better understand why oral

diseases have persisted glo-

bally over the last three de-

cades, despite scientific ad-

The paper also notes that

in high-income countries,

dentistry is increasingly

vancements in the field.

tries the burden of oral diseases is considerable, but oral care systems are often underdeveloped and unaf-

fordable to the majority. In low-income countries the current situation is most bleak, with even basic dental care unavailable and most disease untreated. Manu Raj Mathur, head,

health policy, and additional professor, Public Health Foundation of India, said: "Recently, the government of India announced the Ayushman Bharat Yojana, which aims at strengthening the primary health care and providing financial protection to the most vulnerable sections of the society. It is aimed at creating awareness, screening and symptomatic care for oral diseases, counselling for tobacco cessation and referral to tobacco cessation centres.'