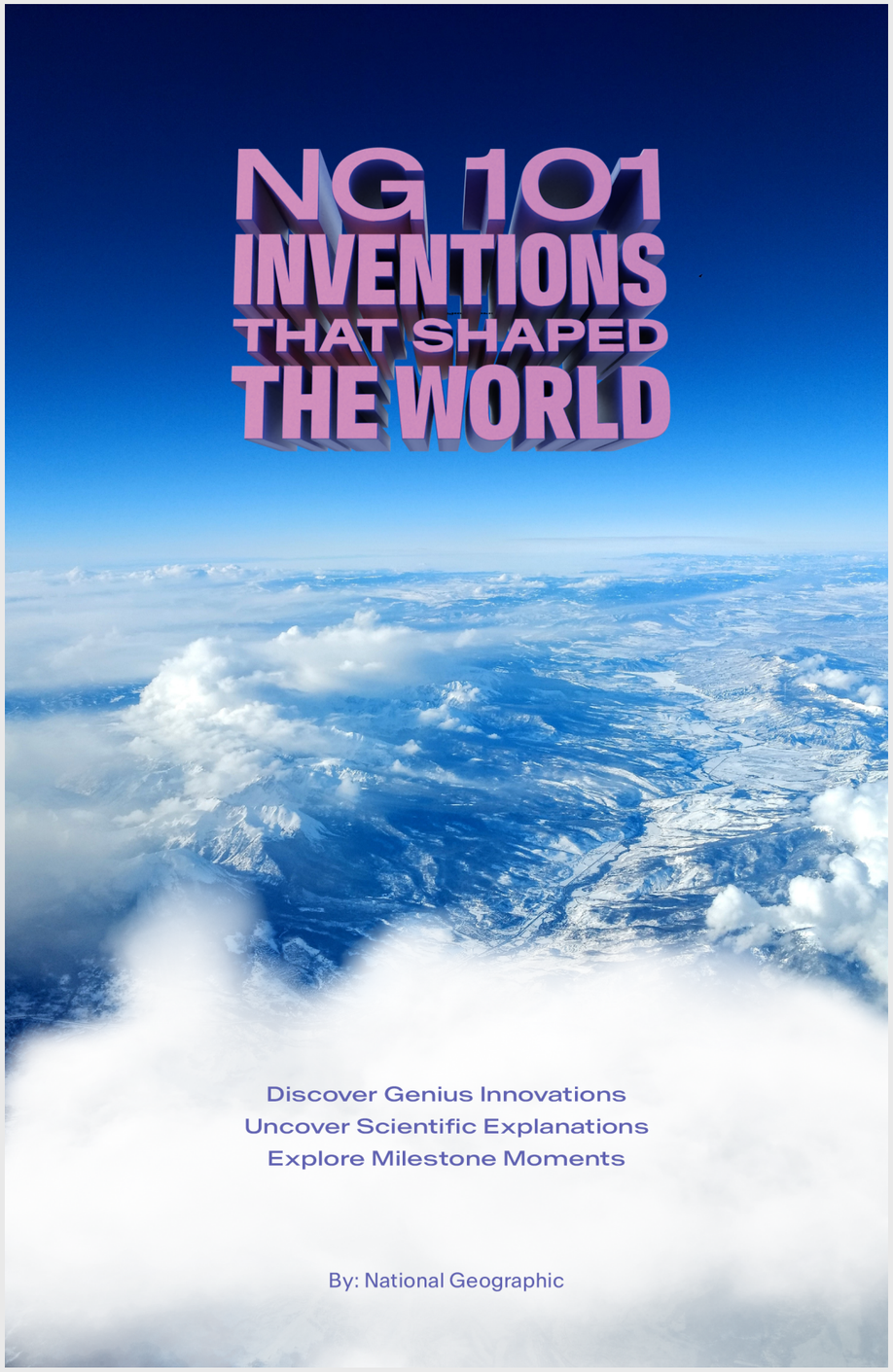
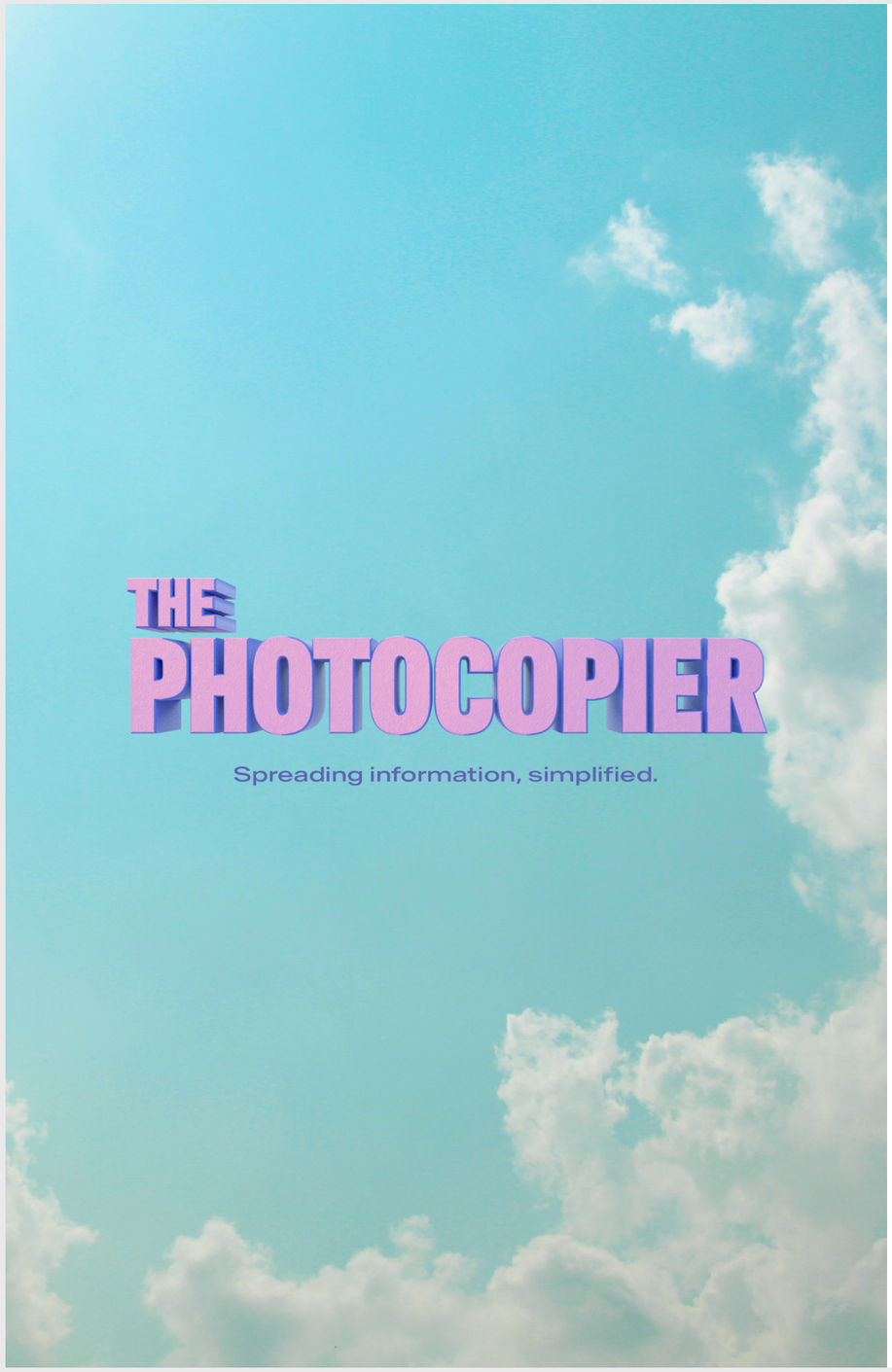
NG 101 INVENTIONS THAT SHAPED THE WORLD:

CELLOPHANE & THE PHOTOCOPIER


Discover Genius Innovations
Uncover Scientific Explanations
Explore Milestone Moments
NG 101
INVENTIONS
THAT SHAPED
THE WORLD
August 1–31, 2021
THE PHOTO-COPIER
SCAD
NATIONAL GEOGRAPHIC
2004 Habersham St
Savannah, GA 31401
763 443 1251
srgallery.com
srgallery


Discover Genius Innovations
Uncover Scientific Explanations
Explore Milestone Moments
NG 101
INVENTIONS
THAT SHAPED
THE WORLD
August 1–31, 2021
CELLO-
PHANE
SCAD
NATIONAL GEOGRAPHIC
2004 Habersham St
Savannah, GA 31401
763 443 1251
srgallery.com
srgallery


NG 101
INVENTIONS
THAT SHAPED
THE WORLD
Discover Genius Innovations
Uncover Scientific Explanations
Explore Milestone Moments
By: National Geographic



24

INFORMATION MULTIPLIED BY THE PHOTOCOPIER

Since the days of Johannes Gutenberg and the printing press, many inventors have hoped to make printing faster and more efficient. Photographs, ink transfers, and even an interesting invention used by Thomas Jefferson, called the polygraph, proved unsuccessful. Finally, in 1959, the Xerox company debuted the first reliable copier, using a “dry” process, preferable to the messy inked versions of earlier inventions. The machine produced replicas quickly and soon landed in every business office that could afford the nearly 650-pound (300-kg) device.

Suddenly, consumers were making billions of copies every year. The photocopier turned every person into a publisher and spread information faster than ever. Anyone could bypass the gatekeepers at magazines and newspapers to spread any advertisement, concert poster, or political flyer with ease. It was an early step into the information age.

The rise of the photocopier had unintended consequences as well. Classified and private documents were easier to leak or misplace. Authors worried that their books or articles would face copyright problems. The photocopier became an important tool for social movements fighting against oppressive governments or censorship policies. Since the arrival of computers and email, the photocopier plays a smaller role, but it set the standards for sharing information, enforcing copyright, and doing business.

WRAPPED UP WITH CELLOPHANE

In 1900, Swiss textile engineer Jaques Brandenberger was seated at a restaurant when a patron spilled wine on the tablecloth. Brandenberger decided then to develop a clear, flexible film that could be sprayed onto fabric to make it waterproof. Unfortunately, his concoction of cellulose and glycerol peeled off the fabric in large transparent sheets. But by 1912, Brandenberger had found a viable commercial use for his creation: eyepieces in gas masks. He called his transparent film cellophane and formed the firm La Cellophane to manufacture it.

Sensing the item's potential, the American chemical company DuPont set up the DuPont Cellophane Company and in 1923 bought the rights to manufacture the product from Brandenberger. In 1926, DuPont engineers developed a cellophane impervious to all moisture, allowing the product to be used for food packaging, preserving the freshness of produce and meals. Natural cellophane, made from cellulose fibers, is 100 per-cent biodegradable, making it one of the most environmentally friendly disposable food wrappings.