

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

The Perfectionists How Precision Engineers Created The Modern World

"With When Death Becomes Life, Joshua Mezrich has performed the perfect core biopsy of transplantation—a clear and compelling account of the grueling daily work, the spell-binding history and the unsettling ethical issues that haunt this miraculous lifesaving treatment. Mezrich's compassionate and honest voice, punctuated by a sharp and intelligent wit, render the enormous subject not just palatable but downright

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

engrossing."—Pauline Chen, author of Final Exam: A Surgeon's Reflections on Mortality A gifted surgeon illuminates one of the most profound, awe-inspiring, and deeply affecting achievements of modern day medicine—the movement of organs between bodies—in this exceptional work of death and life that takes its place besides Atul Gawande's Complications, Siddhartha Mukherjee's The Emperor of All Maladies, and Jerome Groopman's How Doctors Think. At the University of Wisconsin, Dr. Joshua Mezrich creates life from loss, transplanting organs from one body to another. In this intimate, profoundly moving work, he illuminates the

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

extraordinary field of transplantation that enables this kind of miracle to happen every day. When Death Becomes Life is a thrilling look at how science advances on a grand scale to improve human lives. Mezrich examines more than one hundred years of remarkable medical breakthroughs, connecting this fascinating history with the inspiring and heartbreaking stories of his transplant patients. Combining gentle sensitivity with scientific clarity, Mezrich reflects on his calling as a doctor and introduces the modern pioneers who made transplantation a reality—maverick surgeons whose feats of imagination, bold vision, and daring risk taking generated techniques and practices that

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

save millions of lives around the world. Mezrich takes us inside the operating room and unlocks the wondrous process of transplant surgery, a delicate, intense ballet requiring precise timing, breathtaking skill, and at times, creative improvisation. In illuminating this work, Mezrich touches the essence of existence and what it means to be alive. Most physicians fight death, but in transplantation, doctors take from death. Mezrich shares his gratitude and awe for the privilege of being part of this transformative exchange as the dead give their last breath of life to the living. After all, the donors are his patients, too. When Death Becomes Life also engages in fascinating ethical and

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

philosophical debates: How much risk should a healthy person be allowed to take to save someone she loves? Should a patient suffering from alcoholism receive a healthy liver? What defines death, and what role did organ transplantation play in that definition? The human story behind the most exceptional medicine of our time, Mezrich's riveting book is a beautiful, poignant reminder that a life lost can also offer the hope of a new beginning.

The international bestselling author of The Professor and the Madman and Krakatoa vividly brings to life the 1906 San Francisco Earthquake that leveled a city symbolic of America's relentless western

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

expansion. Simon Winchester has also fashioned an enthralling and informative look at the tumultuous subterranean world that produces earthquakes, the planet's most sudden and destructive force. In the early morning hours of April 18, 1906, San Francisco and a string of towns to its north-northwest and the south-southeast were overcome by an enormous shaking that was compounded by the violent shocks of an earthquake, registering 8.25 on the Richter scale. The quake resulted from a rupture in a part of the San Andreas fault, which lies underneath the earth's surface along the northern coast of California. Lasting little more than a minute, the earthquake

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

wrecked 490 blocks, toppled a total of 25,000 buildings, broke open gas mains, cut off electric power lines throughout the Bay area, and effectively destroyed the gold rush capital that had stood there for a half century. Perhaps more significant than the tremors and rumbling, which affected a swatch of California more than 200 miles long, were the fires that took over the city for three days, leaving chaos and horror in its wake. The human tragedy included the deaths of upwards of 700 people, with more than 250,000 left homeless. It was perhaps the worst natural disaster in the history of the United States. Simon Winchester brings his inimitable storytelling abilities -- as well as his unique

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

understanding of geology -- to this extraordinary event, exploring not only what happened in northern California in 1906 but what we have learned since about the geological underpinnings that caused the earthquake in the first place. But his achievement is even greater: he positions the quake's significance along the earth's geological timeline and shows the effect it had on the rest of twentieth-century California and American history. A Crack in the Edge of the World is the definitive account of the San Francisco earthquake. It is also a fascinating exploration of a legendary event that changed the way we look at the planet on which we live.

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

A True Portrait of One of the World's Most Chaotic and Beautiful Regions That Explains Why Violence Has Always Occurred There--And Why It May Continue For Years To Come The vast and mountainous area that makes up the Balkans is rife with discord, both cultural and topographical. And, as Simon Winchester superbly demonstrates in this intimate portrait of the region, much of the political strife of the past century can be traced to its inherent contrasts. With the aid of a guide and linguist, Winchester traveled deep into the region's most troublesome areas--including Slovenia, Croatia, Bosnia, Montenegro, Albania, Kosovo, and Turkey--just

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

as the war was tearing these countries apart. The result is a book not just about war but also about how war affects the living. Both timeless and current, The Fracture Zone goes behind the headlines to offer a true picture of a region that has always been on the brink. Winchester's remarkable journey puts all the elements together--the faults, the fractures, and the chaos--to make sense out of a seemingly senseless place.

Like the heroic land that is its subject, Poland teems with vivid events and unforgettable characters in the sweeping span of eight tumultuous centuries. In a tradition of resistance to barbarian Tatar invaders and brutal Nazi occupiers, with a

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

heritage of pride that burns through eras of romantic passion and courageous solidarity, three Polish families live out their destinies and - and the drama of a nation.

The Stories Behind Amazing Structures

The Boundless Sea

To Engineer is Human

The Man Who Loved China

A Human History of the Oceans

Engineering for Industrial

Designers and Inventors

Notes from a Transplant Surgeon

The never-before-told story of one of the worst rail disasters in U.S. history in which two trains full of people, trapped high in the Cascade Mountains, are hit by a devastating avalanche

Read Book The Perfectionists How Precision Engineers Created The Modern World

In February 1910, a monstrous blizzard centered on Washington State hit the Northwest, breaking records. The world stopped—but nowhere was the danger more terrifying than near a tiny town called Wellington, perched high in the Cascade Mountains, where a desperate situation evolved minute by minute: two trainloads of cold, hungry passengers and their crews found themselves marooned without escape, their railcars gradually being buried in the rising drifts. For days, an army of the Great Northern Railroad's most dedicated men—led by the line's legendarily courageous

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

superintendent, James O'Neill—worked round-the-clock to rescue the trains. But the storm was unrelenting, and to the passenger's great anxiety, the railcars—their only shelter—were parked precariously on the edge of a steep ravine. As the days passed, food and coal supplies dwindled. Panic and rage set in as snow accumulated deeper and deeper on the cliffs overhanging the trains. Finally, just when escape seemed possible, the unthinkable occurred: the earth shifted and a colossal avalanche tumbled from the high pinnacles, sweeping the

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

trains and their sleeping passengers over the steep slope and down the mountainside. Centered on the astonishing spectacle of our nation's deadliest avalanche, Gary Krist's The White Cascade is the masterfully told story of a supremely dramatic and never-before-documented American tragedy. An adventure saga filled with colorful and engaging history, this is epic narrative storytelling at its finest.

A critical resource for K-12 educators that serve BIPOC and first-generation students that explores why inclusive and culturally relevant pedagogy is

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

necessary to ensure the
success of their students
For readers of White Folks
Who Teach in the Hood...And
The Rest of Y'all Too,
Education Across Borders is
a strong teacher development
resource for white educators
who serve BIPOC students and
are looking for culturally
relevant pedagogies that
value the diverse
experiences of their
students. The practices and
values in the U.S.
educational system position
linguistically, culturally,
and socioeconomically
diverse children and
families at a
disadvantage. BIPOC dropout
rates and levels of stress

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

and anxiety have linked with non-inclusive school environments. In this collection, three educators and will draw on their experiences as immigrants and educators to address racial inequity in the classroom and provide a thorough analysis of different strategies that create an inclusive classroom environment. With a focus on Haitian and Dominican students in the U.S., the authors will reveal the challenges that immigrant and first-generation students face. They'll also offer insights about topics such as: • How do language policies and

Read Book The Perfectionists How Precision Engineers Created The Modern World

social justice intersect? • How can educators use culturally relevant teaching and community funds of knowledge to enrich school curriculum? • How can educators center the needs of the student within the classroom? • How can educators support Haitian Creole-speaking students? From the bestselling author Simon Winchester, a human history of land around the world: who mapped it, owned it, stole it, cared for it, fought for it and gave it back.

The career of computer visionary Grace Murray Hopper, whose innovative work in programming laid the

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

foundations for the user-friendliness of today's personal computers that sparked the information age. A Hollywood biopic about the life of computer pioneer Grace Murray Hopper (1906-1992) would go like this: a young professor abandons the ivy-covered walls of academia to serve her country in the Navy after Pearl Harbor and finds herself on the front lines of the computer revolution. She works hard to succeed in the all-male computer industry, is almost brought down by personal problems but survives them, and ends her career as a celebrated elder stateswoman of

Read Book The Perfectionists How Precision Engineers Created The Modern World

computing, a heroine to thousands, hailed as the inventor of computer programming. Throughout Hopper's later years, the popular media told this simplified version of her life story. In *Grace Hopper and the Invention of the Information Age*, Kurt Beyer reveals a more authentic Hopper, a vibrant and complex woman whose career paralleled the meteoric trajectory of the postwar computer industry. Both rebellious and collaborative, Hopper was influential in male-dominated military and business organizations at a time when women were

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

encouraged to devote themselves to housework and childbearing. Hopper's greatest technical achievement was to create the tools that would allow humans to communicate with computers in terms other than ones and zeroes. This advance influenced all future programming and software design and laid the foundation for the development of user-friendly personal computers.

The Men Who United the States

The Untold Story of the Women Who Helped Win World War II

The Enduring Story of Astronomy's Vanishing

Read Book The Perfectionists
How Precision Engineers
Created The Modern World
Explorers

The Last Englishmen

Extended Heredity

My Return to the Balkans

Poland

*"Variably genial,
cautionary, lyrical,
admonitory, terrifying,
horrifying and
inspiring...A lifetime of
thought, travel,
reading, imagination and
memory inform this
affecting account."*

*—Kirkus Reviews (starred
review) Blending history
and anecdote, geography
and reminiscence,
science and exposition,*

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

New York Times

bestselling author Simon Winchester tells the breathtaking saga of the Atlantic Ocean. A gifted storyteller and consummate historian, Winchester sets the great blue sea's epic narrative against the backdrop of mankind's intellectual evolution, telling not only the story of an ocean, but the story of civilization. Fans of Winchester's Krakatoa, The Man Who Loved China, and The Professor and

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

*the Madman will love
this masterful,
penetrating, and
resonant tale of
humanity finding its way
across the ocean of
history.*

*The untold story of the
bloody revolution that
stripped the pope of
political power and
signalled the birth of
modern Europe.*

*The revered New York
Times bestselling author
traces the development
of technology from the
Industrial Age to the
Digital Age to explore*

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

the single component crucial to advancement - precision - in a superb history that is both an homage and a warning for our future. At the dawn of the Industrial Revolution in eighteenth-century England, standards of measurement were established, giving way to the development of machine tools--machines that make machines. Eventually, the application of precision tools and methods resulted in the creation

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

and mass production of items from guns and glass to mirrors, lenses, and cameras--and eventually gave way to further breakthroughs, including gene splicing, microchips, and the Hadron Collider. Simon Winchester takes us back to origins of the Industrial Age, to England where he introduces the scientific minds that helped usher in modern production: John Wilkinson, Henry Maudslay, Joseph Bramah,

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

*Jesse Ramsden, and
Joseph Whitworth. It was
Thomas Jefferson who
later exported their
discoveries to the
fledgling United States,
setting the nation on
its course to become a
manufacturing titan.
Winchester moves forward
through time, to today's
cutting-edge
developments occurring
around the world, from
America to Western
Europe to Asia. As he
introduces the minds and
methods that have
changed the modern*

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

world, Winchester explores fundamental questions. Why is precision important? What are the different tools we use to measure it? Who has invented and perfected it? Has the pursuit of the ultra-precise in so many facets of human life blinded us to other things of equal value, such as an appreciation for the age-old traditions of craftsmanship, art, and high culture? Are we missing something that

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

reflects the world as it is, rather than the world as we think we would wish it to be? And can the precise and the natural co-exist in society?

“Another gem from one of the world’s justly celebrated historians specializing in unusual and always fascinating subjects and people.” – Booklist (starred review) The revered New York Times bestselling author traces the development of technology from the

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

Industrial Age to the Digital Age to explore the single component crucial to advancement—precision—in a superb history that is both an homage and a warning for our future. The rise of manufacturing could not have happened without an attention to precision. At the dawn of the Industrial Revolution in eighteenth-century England, standards of measurement were established, giving way to the development of

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

*machine tools—machines
that make machines.*

*Eventually, the
application of precision
tools and methods
resulted in the creation
and mass production of
items from guns and
glass to mirrors,
lenses, and cameras—and
eventually gave way to
further breakthroughs,
including gene splicing,
microchips, and the
Hadron Collider. Simon
Winchester takes us back
to origins of the
Industrial Age, to
England where he*

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

introduces the scientific minds that helped usher in modern production: John Wilkinson, Henry Maudslay, Joseph Bramah, Jesse Ramsden, and Joseph Whitworth. It was Thomas Jefferson who later exported their discoveries to the fledgling United States, setting the nation on its course to become a manufacturing titan. Winchester moves forward through time, to today's cutting-edge developments occurring

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

around the world, from America to Western Europe to Asia. As he introduces the minds and methods that have changed the modern world, Winchester explores fundamental questions. Why is precision important? What are the different tools we use to measure it? Who has invented and perfected it? Has the pursuit of the ultra-precise in so many facets of human life blinded us to other things of equal value,

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

*such as an appreciation
for the age-old
traditions of
craftsmanship, art, and
high culture? Are we
missing something that
reflects the world as it
is, rather than the
world as we think we
would wish it to be? And
can the precise and the
natural co-exist in
society?*

*Their Noble Lordships
An Introduction to
Measurement and
Calibration
The White Cascade
The Perfectionists*

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

The Fracture Zone

***Earthquakes, Volcanoes,
and Tsunamis***

***From Automobiles to
Zippers***

A NEW YORK TIMES BOOK OF THE YEAR Henrietta Lovell is best known as 'The Rare Tea Lady'. She is on a mission to revolutionise the way we drink tea by replacing industrially produced teabags with the highest quality tea leaves. Her quest has seen her travel to the Shire Highlands of Malawi, across the foothills of the Himalayas, and to hidden gardens in the Wuyi-Shan to source the world's most extraordinary teas. Infused invites us to discover these remarkable places, introducing us to the individual growers and household name chefs

Read Book The Perfectionists How Precision Engineers Created The Modern World

Lovell has met along the way - and reveals the true pleasures of tea. The result is a delicious infusion of travel writing, memoir, recipes, and glorious photography, all written with Lovell's unique charm and wit.

An introduction to the scientific and geological sources of earthquakes, volcanoes, and tsunamis examines their impact on people and the world at large.

In sumptuous and illuminating detail, Simon Winchester, the bestselling author of *The Professor and the Madman* ("Elegant and scrupulous"—*New York Times Book Review*) and *Krakatoa* ("A mesmerizing page-turner"—*Time*) brings to life the extraordinary story of Joseph Needham, the brilliant

Read Book The Perfectionists How Precision Engineers Created The Modern World

Cambridge scientist who unlocked the most closely held secrets of China, long the world's most technologically advanced country. No cloistered don, this tall, married Englishman was a freethinking intellectual, who practiced nudism and was devoted to a quirky brand of folk dancing. In 1937, while working as a biochemist at Cambridge University, he instantly fell in love with a visiting Chinese student, with whom he began a lifelong affair. He soon became fascinated with China, and his mistress swiftly persuaded the ever-enthusiastic Needham to travel to her home country, where he embarked on a series of extraordinary expeditions to the farthest frontiers of this ancient empire. He searched everywhere for evidence to bolster his conviction that

Read Book The Perfectionists How Precision Engineers Created The Modern World

the Chinese were responsible for hundreds of mankind's most familiar innovations—including printing, the compass, explosives, suspension bridges, even toilet paper—often centuries before the rest of the world. His thrilling and dangerous journeys, vividly recreated by Winchester, took him across war-torn China to far-flung outposts, consolidating his deep admiration for the Chinese people. After the war, Needham was determined to tell the world what he had discovered, and began writing his majestic *Science and Civilisation in China*, describing the country's long and astonishing history of invention and technology. By the time he died, he had produced, essentially single-handedly, seventeen immense volumes,

Read Book The Perfectionists How Precision Engineers Created The Modern World

marking him as the greatest one-man encyclopedist ever. Both epic and intimate, *The Man Who Loved China* tells the sweeping story of China through Needham's remarkable life. Here is an unforgettable tale of what makes men, nations, and, indeed, mankind itself great—related by one of the world's inimitable storytellers.

“ Engineers are titans of real-world problem-solving. . . . In this riveting study of how they think, [Guru Madhavan] puts behind-the-scenes geniuses . . . center stage. ” —Nature

In this engaging account of innovative triumphs, Guru Madhavan examines the ways in which engineers throughout history created world-changing tools, from ATMs and ZIP codes to the digital camera and the

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

disposable diaper. Equal parts
personal, practical, and profound,
Applied Minds charts a path to a future
where we borrow strategies from
engineering to find inspired solutions to
our most pressing challenges.

101 Things I Learned ® in
Engineering School

Infused

The Fantastic Story of the Eccentric
Scientist Who Unlocked the Mysteries
of the Middle Kingdom

America's Explorers, Inventors,
Eccentrics and Mavericks, and the
Creation of One Nation, Indivisible
Pacific

A Novel

Applied Minds: How Engineers Think
*The revered New York
Times bestselling author*

Read Book The Perfectionists How Precision Engineers Created The Modern World

traces the development of technology from the Industrial Age to the Digital Age to explore the single component crucial to advancement—precision—in a superb history that is both an homage and a warning for our future. The rise of manufacturing could not have happened without an attention to precision. At the dawn of the Industrial Revolution in eighteenth-century England, standards of measurement were

Read Book The Perfectionists How Precision Engineers Created The Modern World

established, giving way to the development of machine tools—machines that make machines. Eventually, the application of precision tools and methods resulted in the creation and mass production of items from guns and glass to mirrors, lenses, and cameras—and eventually gave way to further breakthroughs, including gene splicing, microchips, and the Hadron Collider. Simon Winchester takes us back to origins of the

Read Book The Perfectionists How Precision Engineers Created The Modern World

Industrial Age, to England where he introduces the scientific minds that helped usher in modern production: John Wilkinson, Henry Maudslay, Joseph Bramah, Jesse Ramsden, and Joseph Whitworth. It was Thomas Jefferson who later exported their discoveries to the fledgling United States, setting the nation on its course to become a manufacturing titan. Winchester moves forward through time, to today's

Read Book The Perfectionists How Precision Engineers Created The Modern World *cutting-edge*

developments occurring around the world, from America to Western Europe to Asia. As he introduces the minds and methods that have changed the modern world, Winchester explores fundamental questions. Why is precision important? What are the different tools we use to measure it? Who has invented and perfected it? Has the pursuit of the ultra-precise in so many facets of human life

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

blinded us to other things of equal value, such as an appreciation for the age-old traditions of craftsmanship, art, and high culture? Are we missing something that reflects the world as it is, rather than the world as we think we would wish it to be? And can the precise and the natural co-exist in society?

In this sweeping novel inspired by the Iran-Contra affair, master storyteller James A.

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

Michener conjures the triumphs and tragedies of one family and their dynamic role in the history of the United States and its founding document. Over a tense weekend of reflection, Major Norman Starr of the National Security Council prepares to appear before a congressional committee to publicly account for his covert actions. Hoping to learn something from his proud, troubled heritage, Starr looks

Read Book The Perfectionists How Precision Engineers Created The Modern World

for guidance in the lives of his ancestors: all-Americans who weren't always right. From a framer of the Constitution to a slave owner, from a Supreme Court justice to a courageous suffragist, each recalls an important legacy that Starr must somehow reconcile with his own perilous dilemma. Praise for Legacy "Michener has left his own legacy. . . . [He] is an educator, not just in history but in ethics, and like any

Read Book The Perfectionists How Precision Engineers Created The Modern World

good educator, he's not afraid to confront a complex world.”—Edward Rutherford, Chicago Tribune “Michener tells interesting stories about the Constitution, even if they are fiction. He brings the document alive. . . . Each tale is told with the Michener flair.”—United Press International “An impressive amount of historical drama . . . Captivating historical vignettes [are] woven skillfully within

Read Book The Perfectionists How Precision Engineers Created The Modern World

Starr's talks with his loving wife and loyal attorney."—Kirkus Reviews "A revealing book . . . about the forging of the Constitution and the crises that shaped it."—Associated Press "David Abulafia's new book guides readers along the world's greatest bodies of water to reveal their primary role in human history. The main protagonists are the three major oceans—the Atlantic, the Pacific, and the Indian—

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

which together comprise the majority of the earth's water and cover over half of its surface. Over time, as passage through them gradually extended and expanded, linking first islands and then continents, maritime networks developed, evolving from local exploration to lines of regional communication and commerce and eventually to major arteries. These waterways carried goods, plants, livestock, and

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

*of course people-free
and enslaved-across vast
expanses, transforming
and ultimately linking
irrevocably the
economies and cultures
of Africa, Europe, Asia,
and the Americas"--*

*In this unique primer,
an experienced civil
engineer and instructor
presents the physics and
fundamentals that
underlie the many fields
of engineering. Far from
a dry, nuts-and-bolts
exposition, however, 101
THINGS I LEARNED® IN
ENGINEERING SCHOOL*

Read Book The Perfectionists How Precision Engineers Created The Modern World

probes real-world examples to show how the engineer's way of thinking can—and sometimes cannot—inform our understanding of how things work. Questions from the simple to the profound are illuminated throughout: Why shouldn't soldiers march across a bridge? Why do buildings want to float and cars want to fly? What is the difference between thinking systemically and thinking systematically? How can engineering

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

*solutions sympathize
with the natural
environment? Presented
in the familiar,
illustrated format of
the popular 101 THINGS I
LEARNED® series, 101
THINGS I LEARNED® IN
ENGINEERING SCHOOL
offers an informative
resource for students,
general readers, and
even experienced
engineers, who will
discover within many
provocative new insights
into familiar
principles.*

How Was That Built?

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

*The Science of Rick and
Morty*

*The Pope Who Would Be
King*

*Silicon Chips and
Surfboards, Coral Reefs
and Atom Bombs, Brutal
Dictators, Fading
Empires, and the Coming
Collision of the World's
Superpowers*

*How Precision Engineers
Created the Modern World
Project Management
Immigration, Race, and
Identity in the
Classroom*

**For anyone curious about
the nuts and bolts of human**

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

ingenuity, How Things Are Made is a fascinating exploration of the process behind the manufacture of everyday items. What are bulletproof vests made of? How do manufacturers get lipstick into the tube? How many layers are there in an iPhone screen? The answers to these questions and so much more fascinating information can be found in How Things Are Made, a behind-the-scenes look at the production everyday objects of all kinds, from guitars, sunscreen, and seismographs to running

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

**shoes, jet engines, and
chocolate. Thoroughly
revised and redesigned from
the best-selling 1995
edition, How Things Are
Made also contains three
new entries by author
Andrew Terranova.**

**However, each page still
contains informative step-by-
step text along with detailed
but easy-to-follow
illustrations, diagrams, and
sidebars to tell the stories
behind the things we
sometimes take for granted.
For example, did you know
that Edison didn't really
invent the light bulb? Or**

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

that the first bar code was on a pack of Wrigley's Spearmint gum? Or that a maple seed inspired the design for the helicopter? Discover these fascinating anecdotes and much more in How Things Are Made. Accuracy and consistency are essential to success in manufacturing, and the technology of precision measurement is fully explained and illustrated in this important book for both apprentice and practicing engineers. Imagine you woke up one morning to find everything

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

created by engineers had disappeared. What would you see? No cars, no houses; no phones, bridges or roads. No tunnels under tidal rivers, no soaring skyscrapers. The impact that engineering has had on the human experience is undeniable, but it is also often invisible. In BUILT, structural engineer Roma Agrawal takes a unique look at how construction has evolved from the mud huts of our ancestors to skyscrapers of steel that reach hundreds of metres into the sky. She unearths

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

**how engineers have
tunnelled through
kilometres of solid
mountains; how they've
bridged across the widest
and deepest of rivers, and
tamed Nature's precious -
and elusive - water
resources. She tells vivid
tales of the visionaries who
created the groundbreaking
materials in the Pantheon's
record-holding concrete
dome and the frame of the
record-breaking Eiffel
Tower. Through the lens of
an engineer, Roma examines
tragedies like the collapse of
the Quebec Bridge,**

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

highlighting the precarious task of ensuring people's safety they hold at every step. With colourful stories of her life-long fascination with buildings - and her own hand-drawn illustrations - Roma reveals the extraordinary secret lives of structures.

A portrait of the nineteenth-century architect of Manhattan's city grid shares insights into his personality while surveying the innovations that enabled the developing city of Manhattan to overcome natural obstacles to

Read Book The Perfectionists
How Precision Engineers
Created The Modern World
infrastructure.

Legacy

**The Exile of Pius IX and the
Emergence of Modern
Europe**

The Handplane Book

**The Role of Failure in
Successful Design**

**The Quest to Live Forever
and How It Drives
Civilization**

**Fundamentals for Designers
of Wonderful Things**

How Things Are Made

An authority on creativity introduces us to AI-powered computers that are creating art, literature, and music that may well surpass the creations of humans. Today's computers are composing music that

Read Book The Perfectionists How Precision Engineers Created The Modern World

sounds "more Bach than Bach," turning photographs into paintings in the style of Van Gogh's *Starry Night*, and even writing screenplays. But are computers truly creative—or are they merely tools to be used by musicians, artists, and writers? In this book, Arthur I. Miller takes us on a tour of creativity in the age of machines. Miller, an authority on creativity, identifies the key factors essential to the creative process, from "the need for introspection" to "the ability to discover the key problem." He talks to people on the cutting edge of artificial intelligence, encountering computers that mimic the brain and machines that have defeated champions in chess, *Jeopardy!*, and *Go*. In the central part of the book, Miller explores the riches of computer-created art, introducing us to artists and computer scientists who have, among much else, unleashed an artificial neural network to

Read Book The Perfectionists How Precision Engineers Created The Modern World

create a nightmarish, multi-eyed dog-cat; taught AI to imagine; developed a robot that paints; created algorithms for poetry; and produced the world's first computer-composed musical, *Beyond the Fence*, staged by Android Lloyd Webber and friends. But, Miller writes, in order to be truly creative, machines will need to step into the world. He probes the nature of consciousness and speaks to researchers trying to develop emotions and consciousness in computers. Miller argues that computers can already be as creative as humans—and someday will surpass us. But this is not a dystopian account; Miller celebrates the creative possibilities of artificial intelligence in art, music, and literature.

If you could live forever, would you want to? Both a fascinating look at the history of our strive for immortality and an investigation into whether living forever is

Read Book The Perfectionists How Precision Engineers Created The Modern World

really all it's cracked up to be. A fascinating work of popular philosophy and history that both enlightens and entertains, Stephen Cave investigates whether it just might be possible to live forever and whether we should want to. He also makes a powerful argument that it's our very preoccupation with defying mortality that drives civilization. Central to this book is the metaphor of a mountaintop where one can find the Immortals. Since the dawn of humanity, everyone — whether they know it or not — has been trying to climb that mountain. But there are only four paths up its treacherous slope, and there have only ever been four paths. Throughout history, people have wagered everything on their choice of the correct path, and fought wars against those who've chosen differently. In drawing back the curtain on what compels humans to "keep on keeping on,"

Read Book The Perfectionists How Precision Engineers Created The Modern World

Cave engages the reader in a number of mind-bending thought experiments. He teases out the implications of each immortality gambit, asking, for example, how long a person would live if they did manage to acquire a perfectly disease-free body. Or what would happen if a super-being tried to round up the atomic constituents of all who've died in order to resurrect them. Or what our loved ones would really be doing in heaven if it does exist. We're confronted with a series of brain-rattling questions: What would happen if tomorrow humanity discovered that there is no life but this one? Would people continue to please their boss, vie for the title of Year's Best Salesman? Would three-hundred-year projects still get started? If the four paths up the Mount of the Immortals lead nowhere—if there is no getting up to the summit—is there still reason to live? And can civilization

Read Book The Perfectionists How Precision Engineers Created The Modern World

survive? Immortality is a deeply satisfying book, as optimistic about the human condition as it is insightful about the true arc of history.

Looks at the contributions of the thousands of women who worked at a secret uranium-enriching facility in Oak Ridge, Tennessee during World War II. The New York Times bestselling author of Krakatoa and The Professor and the Madman takes readers on a quirky and charming tour of the last outpost of the British empire Originally published in 1985, Outposts is Simon Winchester's journey to find the vanishing empire, "on which the sun never sets." In the course of a three-year, 100,000 mile journey—from the chill of the Antarctic to the blue seas of the Caribbean, from the South of Spain and the tip of China to the utterly remote specks in the middle of gale-swept oceans—he discovered such romance and

Read Book The Perfectionists How Precision Engineers Created The Modern World

depravity, opulence and despair that he was inspired to write what may be the last contemporary account of the British empire. Written with Winchester's captivating style and breadth, here are conversations and anecdotes, myths and political analysis, scenery and history—a poignant and colorful record of the lingering beat of what was once the heart of the civilized world.

Great Sea Battles, Heroic Discoveries,
Titanic Storms, and a Vast Ocean of a
Million Stories

Outposts

The Measure of Manhattan: The
Tumultuous Career and Surprising Legacy
of John Randel, Jr., Cartographer,
Surveyor, Inventor

The Unofficial Guide to Earth's Stupidest
Show

The Workshop and the World: What Ten
Thinkers Can Teach Us About Science

Read Book The Perfectionists How Precision Engineers Created The Modern World and Authority

The Last Stargazers

Education Across Borders

If you have designs for wonderful machines in mind, but aren't sure how to turn your ideas into real, engineered products that can be manufactured, marketed, and used, this book is for you. Engineering professor and veteran maker Tom Ask helps you integrate mechanical engineering concepts into your creative design process by presenting them in a

Read Book The Perfectionists How Precision Engineers Created The Modern World

rigorous but largely nonmathematical format. Through mind stories and images, this book provides you with a firm grounding in material mechanics, thermodynamics, fluid dynamics, and heat transfer. Students, product and mechanical designers, and inventive makers will also explore nontechnical topics such as aesthetics, ethnography, and branding that influence product appeal and user preference. Learn the

Read Book The Perfectionists How Precision Engineers Created The Modern World

importance of designing functional products that also appeal to users in subtle ways Explore the role of aesthetics, ethnography, brand management, and material culture in product design Dive into traditional mechanical engineering disciplines related to the behavior of solids, liquids, and gases Understand the human factors of design, such as ergonomics, kinesiology, anthropometry, and biomimicry Get an

Read Book The Perfectionists How Precision Engineers Created The Modern World

overview of available
mechanical systems and
components for creating
your product

Explore the real science
behind the Cartoon

Network phenomenon Rick
and Morty—one of
television's most
irreverent, whip-smart,
and darkly hilarious
shows—and discover how
close we are to Rick's
many experiments
becoming a reality.

Adult Swim's Rick and
Morty is one of the
smartest (and most
insane) shows on

Read Book The Perfectionists How Precision Engineers Created The Modern World

television. Genius alcoholic Rick Sanchez and his hapless grandson Morty have explored everything from particle physics to human augmentation and much more in their intergalactic adventures through the multiverse. With biting humor and plenty of nihilism, Rick and Morty employs cutting-edge scientific theories in every episode. But, outside of Rick's garage laboratory, what are these theories truly

Read Book The Perfectionists How Precision Engineers Created The Modern World

about and what can they teach us about ourselves? Blending biology, chemistry, and physics basics with accessible—and witty—prose, *The Science of Rick and Morty* equips you with the scientific foundation to thoroughly understand Rick's experiments from the show, such as how we can use dark matter and energy, just what is intelligence hacking, and whether or not you can really control a cockroach's nervous

Read Book The Perfectionists How Precision Engineers Created The Modern World

system with your tongue.

Perfect for longtime and

new fans of the show,

this is the ultimate

segue into discovering

more about our

complicated and

fascinating universe.

The story of the people

who see beyond the

stars—an astronomy book

for adults still

spellbound by the night

sky. Humans from the

earliest civilizations

through today have

craned their necks each

night, using the stars

to orient themselves in

Read Book The Perfectionists How Precision Engineers Created The Modern World

the large, strange world around them. Stargazing is a pursuit that continues to fascinate us: from Copernicus to Carl Sagan, astronomers throughout history have spent their lives trying to answer the biggest questions in the universe. Now, award-winning astronomer Emily Levesque shares the stories of modern-day stargazers in this new nonfiction release, the people willing to adventure across high mountaintops and to some

Read Book The Perfectionists How Precision Engineers Created The Modern World

of the most remote corners of the planet, all in the name of science. From the lonely quiet of midnight stargazing to tall tales of wild bears loose in the observatory, *The Last Stargazers* is a love letter to astronomy and an affirmation of the crucial role that humans can and must play in the future of scientific discovery. In this sweeping work of narrative science, Levesque shows how astronomers in this

Read Book The Perfectionists How Precision Engineers Created The Modern World

scrappy and evolving field are going beyond the machines to infuse creativity and passion into the stars and space and inspires us all to peer skyward in pursuit of the universe's secrets.

Simon Winchester, the acclaimed New York Times bestselling author of Atlantic and The Professor and the Madman, delivers his first book about America: a fascinating popular history that illuminates the men who

Read Book The Perfectionists How Precision Engineers Created The Modern World

toiled fearlessly to discover, connect, and bond the citizenry and geography of the U.S.A. from its beginnings. How did America become “one nation, indivisible”? What unified a growing number of disparate states into the modern country we recognize today? To answer these questions, Winchester follows in the footsteps of America’s most essential explorers, thinkers, and innovators, such as Lewis and Clark and the

Read Book The Perfectionists How Precision Engineers Created The Modern World

leaders of the Great Surveys; the builders of the first transcontinental telegraph and the powerful civil engineer behind the Interstate Highway System. He treks vast swaths of territory, from Pittsburgh to Portland, Rochester to San Francisco, Seattle to Anchorage, introducing the fascinating people who played a pivotal role in creating today's United States.

Throughout, he ponders

Read Book The Perfectionists How Precision Engineers Created The Modern World

whether the historic work of uniting the States has succeeded, and to what degree.

Featuring 32 illustrations throughout the text, *The Men Who United the States* is a fresh look at the way in which the most powerful nation on earth came together.

The Artist in the Machine
When Death Becomes Life
The Girls of Atomic City
Immortality
When the Earth Shakes
A Crack in the Edge of

Read Book The Perfectionists How Precision Engineers Created The Modern World the World

Grace Hopper and the Invention of the Information Age

There is much more to heredity than genes. For much of the twentieth century it was assumed that genes alone mediate the transmission of biological information across generations and provide the raw material for natural selection. Yet, it's now clear that genes are not the only basis of heredity. In *Extended Heredity*, evolutionary biologists Russell Bonduriansky and Troy Day explore the latest research showing that what happens during our lifetimes—and even our parents' and grandparents' lifetimes—can influence the features of our

Read Book The Perfectionists How Precision Engineers Created The Modern World

descendants. Based on this evidence, Bonduriansky and Day develop an extended concept of heredity that upends ideas about how traits can and cannot be transmitted across generations, opening the door to a new understanding of inheritance, evolution, and even human health. The landmark project management reference, now in a new edition Now in a Tenth Edition, this industry-leading project management "bible" aligns its streamlined approach to the latest release of the Project Management Institute's Project Management Body of Knowledge (PMI®'s PMBOK® Guide), the new mandatory source of training for the Project Management Professional (PMP®) Certification Exam. This

Read Book The Perfectionists How Precision Engineers Created The Modern World

outstanding edition gives students and professionals a profound understanding of project management with insights from one of the best-known and respected authorities on the subject. From the intricate framework of organizational behavior and structure that can determine project success to the planning, scheduling, and controlling processes vital to effective project management, the new edition thoroughly covers every key component of the subject. This Tenth Edition features: New sections on scope changes, exiting a project, collective belief, and managing virtual teams More than twenty-five case studies, including a new case on the Iridium Project covering all

Read Book The Perfectionists How Precision Engineers Created The Modern World

aspects of project management 400
discussion questions More than 125
multiple-choice questions (PMI,
PMBOK, PMP, and Project
Management Professional are
registered marks of the Project
Management Institute, Inc.)

A study of the hereditary peers of
Great Britain, their history, their
place in British society, and their
varied lifestyles concludes that the
hereditary aristocracy should be
abolished

A fascinating look at key thinkers
throughout history who have shaped
public perception of science and the
role of authority. When does a
scientific discovery become accepted
fact? Why have scientific facts
become easy to deny? And what can

Read Book The Perfectionists How Precision Engineers Created The Modern World

we do about it? In *The Workshop and the World*, philosopher and science historian Robert P. Crease answers these questions by describing the origins of our scientific infrastructure—the “workshop”—and the role of ten of the world’s greatest thinkers in shaping it. At a time when the Catholic Church assumed total authority, Francis Bacon, Galileo Galilei, and René Descartes were the first to articulate the worldly authority of science, while writers such as Mary Shelley and Auguste Comte told cautionary tales of divorcing science from the humanities. The provocative leaders and thinkers Kemal Atatürk and Hannah Arendt addressed the

Read Book The Perfectionists How Precision Engineers Created The Modern World

relationship between the scientific community and the public in in times of deep distrust. As today's politicians and government officials increasingly accuse scientists of dishonesty, conspiracy, and even hoaxes, engaged citizens can't help but wonder how we got to this level of distrust and how we can emerge from it. This book tells dramatic stories of individuals who confronted fierce opposition—and sometimes risked their lives—in describing the proper authority of science, and it examines how ignorance and misuse of science constitute the preeminent threat to human life and culture. An essential, timely exploration of what it means to practice science for the common good as well as the danger

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

of political action divorced from science, *The Workshop and the World* helps us understand both the origins of our current moment of great anti-science rhetoric and what we can do to help keep the modern world from falling apart.

A Systems Approach to Planning, Scheduling, and Controlling

A New Understanding of Inheritance and Evolution

Journeys to the Surviving Relics of the British Empire

Land: How the Hunger for Ownership Shaped the Modern World

The World of AI-Powered Creativity
America and the Great California Earthquake of 1906

Love, War, and the End of Empire

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

The Handplane Book evokes the romance of an earlier era when planes performed countless woodworking tasks, from preparing stock to shaping moldings. This is a complete guide to one of the best-known and most collectible hand tools.

A sumptuous biographical saga, both intimate and epic, about the waning of the British Empire in India John Auden was a pioneering geologist of the Himalaya. Michael Spender was the first to draw a detailed map of the North Face of Mount Everest. While their younger

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

brothers—W. H. Auden and Stephen Spender—achieved literary fame, they vied to be included on an expedition that would deliver Everest's summit to an Englishman, a quest that had become a metaphor for Britain's struggle to maintain power over India. To this rivalry was added another: in the summer of 1938 both men fell in love with a painter named Nancy Sharp. Her choice would determine where each man's wartime loyalties would lie. Set in Calcutta, London, the glacier-locked wilds of the

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

Karakoram, and on Everest itself, The Last Englishmen is also the story of a generation. The cast of this exhilarating drama includes Indian and English writers and artists, explorers and Communist spies, Die Hards and Indian nationalists, political rogues and police informers. Key among them is a highborn Bengali poet named Sudhin Datta, a melancholy soul torn, like many of his generation, between hatred of the British Empire and a deep love of European literature, whose life would be upended

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

*by the arrival of war on his
Calcutta doorstep. Dense
with romance and intrigue,
and of startling relevance
for the great power games
of our own day, Deborah
Baker's The Last
Englishmen is an engrossing
story that traces the end of
empire and the stirring of a
new world order.*

*One of Library Journal's 10
Best Books of 2015
Following his acclaimed
Atlantic and The Men Who
United the States, New York
Times bestselling author
Simon Winchester offers an
enthralling biography of the*

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

Pacific Ocean and its role in the modern world, exploring our relationship with this imposing force of nature. As the Mediterranean shaped the classical world, and the Atlantic connected Europe to the New World, the Pacific Ocean defines our tomorrow. With China on the rise, so, too, are the American cities of the West coast, including Seattle, San Francisco, and the long cluster of towns down the Silicon Valley. Today, the Pacific is ascendant. Its geological history has long transformed

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

us—tremendous earthquakes, volcanoes, and tsunamis—but its human history, from a Western perspective, is quite young, beginning with Magellan's sixteenth-century circumnavigation. It is a natural wonder whose most fascinating history is currently being made. In telling the story of the Pacific, Simon Winchester takes us from the Bering Strait to Cape Horn, the Yangtze River to the Panama Canal, and to the many small islands and archipelagos that lie in

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

between. He observes the fall of a dictator in Manila, visits aboriginals in northern Queensland, and is jailed in Tierra del Fuego, the land at the end of the world. His journey encompasses a trip down the Alaska Highway, a stop at the isolated Pitcairn Islands, a trek across South Korea and a glimpse of its mysterious northern neighbor. Winchester's personal experience is vast and his storytelling second to none. And his historical understanding of the region is formidable, making Pacific a paean to this magnificent

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

sea of beauty, myth, and imagination that is transforming our lives.

“Though ours is an age of high technology, the essence of what engineering is and what engineers do is not common knowledge. Even the most elementary of principles upon which great bridges, jumbo jets, or super computers are built are alien concepts to many. This is so in part because engineering as a human endeavor is not yet integrated into our culture and intellectual tradition. And while educators are

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

currently wrestling with the problem of introducing technology into conventional academic curricula, thus better preparing today's students for life in a world increasingly technological, there is as yet no consensus as to how technological literacy can best be achieved. " I believe, and I argue in this essay, that the ideas of engineering are in fact in our bones and part of our human nature and experience. Furthermore, I believe that an understanding and an appreciation of engineers

Read Book The Perfectionists
How Precision Engineers
Created The Modern World

*and engineering can be
gotten without an
engineering or technical
education. Thus I hope that
the technologically
uninitiated will come to read
what I have written as an
introduction to technology.
Indeed, this book is my
answer to the questions
'What is engineering?' and
'What do engineers do?'" -
Henry Petroski, To Engineer
is Human*

*Class and Power in Modern
Britain*

Atlantic

Adventures in Tea

The Great Northern Railway

Read Book The Perfectionists
How Precision Engineers
Created The Modern World
*Disaster and America's
Deadliest Avalanche*