



The Empire State Building



by Meish Goldish

[Intentionally Left Blank]



The Empire State Building



by Meish Goldish

Consultants:

**Carol A. Willis, Founder and Director
The Skyscraper Museum
New York, New York**

**Katie Uva, Andrew W. Mellon Foundation Predoctoral Fellow
Museum of the City of New York
New York, New York**

BEARPORT
PUBLISHING

New York, New York

Credits

Cover, © Leonard Zhukovsky/Shutterstock; 2–3, © ThinAir/Shutterstock; 4, © AP Photo; 5, tinyurl.com/zppcfzs/Public Domain; 6L, Library of Congress; 6R, Library of Congress; 7L, © ID1974/Shutterstock; 7R, © Andrey Antipin/Shutterstock; 8, © John Arnold Images Ltd/Alamy Stock Photo; 9L, © Pictorial Press Ltd/Alamy Stock Photo; 9R, © Atomic/Alamy Stock Photo; 10, © Lebrecht Music and Arts Photo Library/Alamy Stock Photo; 11, © Image from the collection of The Skyscraper Museum; 12–13, tinyurl.com/zhlkvs6/Public Domain; 12T, © AP Photo; 14, © Image from the collection of The Skyscraper Museum; 15, © Image from the collection of The Skyscraper Museum; 16, © Everett Collection Inc/Alamy Stock Photo; 17L, tinyurl.com/h3epp2n/Public Domain; 17R, © Iurii Kachkovskiy/Shutterstock; 18, © Lewis W. Hine Glasshouse Images/Newscom; 19L, © Prisma Bildagentur AG/Alamy Stock Photo; 19R, © Bettmann/CORBIS; 20L, © Image from the collection of The Skyscraper Museum; 20R, © Image from the collection of The Skyscraper Museum; 21, © Image from the collection of The Skyscraper Museum; 22L, © AP Photo; 22R, © T Photography/Shutterstock; 23, © Matt Ragen/Shutterstock; 24, © AP Photo; 25L, © JASON SZENES UPI Photo Service/Newscom; 25R, © Ivan Marc/Shutterstock; 26T, © Pictorial Press Ltd/Alamy Stock Photo; 26B, © Pictorial Press Ltd/Alamy Stock Photo; 27, © Songquan Deng/Shutterstock; 28–29 (background), © robert_s/Shutterstock; 28, © Anton_Ivanov/Shutterstock; 29, © aurielaki/Alamy Stock Vector; 32, © Anton_Ivanov/Shutterstock.

Publisher: Kenn Goin

Editor: Jessica Rudolph

Creative Director: Spencer Brinker

Design: The Design Lab

Photo Researcher: Editorial Directions, Inc.

Library of Congress Cataloging-in-Publication Data

Names: Goldish, Meish, author.

Title: The Empire State Building / by Meish Goldish.

Description: New York, New York : Bearport Publishing, 2017. | Series: American places. From vision to reality | Includes bibliographical references and index.

Identifiers: LCCN 2016012274 (print) | LCCN 2016014023 (ebook) | ISBN 9781944102432 (library binding) | ISBN 9781944997120 (ebook)

Subjects: LCSH: Empire State Building (New York, N.Y.)—Juvenile literature.

| New York (N.Y.)—Buildings, structures, etc.—Juvenile literature.

Classification: LCC F128.8.E46 G63 2017 (print) | LCC F128.8.E46 (ebook) | DDC 974.7—dc23

LC record available at <http://lccn.loc.gov/2016012274>

Copyright © 2017 Bearport Publishing Company, Inc. All rights reserved.

No part of this publication may be reproduced in whole or in part, stored in any retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission from the publisher.

For more information, write to Bearport Publishing Company, Inc., 45 West 21st Street, Suite 3B, New York, New York 10010.

Printed in the United States of America.

10 9 8 7 6 5 4 3 2 1



Contents

Scraping the Sky	4
Making It Possible	6
The Design	8
Tearing Down the Old	10
Hard Times	12
Starting at the Bottom	14
Teams at Work	16
“Don’t Look Down!”	18
Finishing Up.	20
Opening Day	22
Repairs and Additions	24
A Building for All.	26
 The Empire State Building: By the Numbers . . .	28
Glossary	30
Bibliography	31
Read More	31
Learn More Online	31
Index.	32
About the Author	32

Scraping the Sky

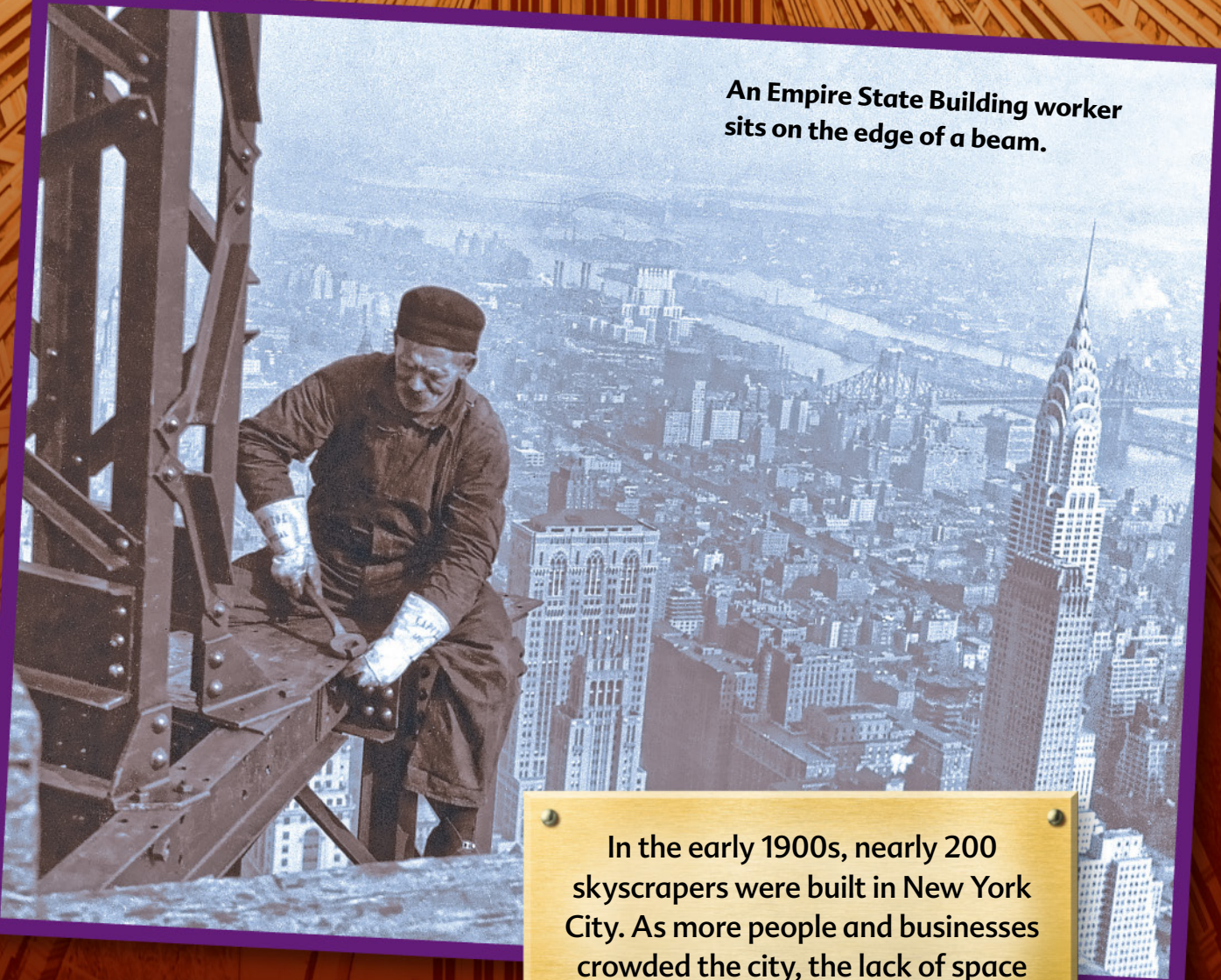
In 1930, anyone walking down Fifth Avenue in New York City would have seen something amazing. At a construction site, groups of workers lifted giant **beams** across metal **columns** and connected them with **rivets**. It was a normal day on the job, except the men were hundreds of feet in the air! The workers were constructing the Empire State Building—the tallest **skyscraper** the world had ever seen.

An aerial photograph of New York City in 1930, showing the Empire State Building under construction. The building is a tall, white, Art Deco-style skyscraper with a distinctive spire, rising above the surrounding dense urban landscape of lower-rise buildings. The construction site is visible at the top of the building, with scaffolding and cranes. The surrounding city is a grid of various sized buildings, with some taller structures also visible in the distance.

The Empire State Building got its name from the nickname for New York State: The Empire State.

Working on the building was very dangerous. Men had to balance on the narrow beams, making sure they didn't lose their footing. One wrong move and a worker could **plummet** to the ground far below. As the building grew taller, workers rose toward the clouds to complete all 102 floors.

An Empire State Building worker sits on the edge of a beam.



In the early 1900s, nearly 200 skyscrapers were built in New York City. As more people and businesses crowded the city, the lack of space resulted in taller office buildings.



Making It Possible

The Empire State Building was the dream of John J. Raskob and Al Smith. The two men wanted to create a large office building for many of the city's growing businesses. Their goal was to construct an impressive structure that would stand out among all the other skyscrapers. One way to do this would be to make it taller than any other building. How could this be achieved?



John J. Raskob was a wealthy businessman.



Al Smith served as the governor of New York in the 1920s.

Before the late 1800s, most buildings were supported by wooden or stone walls. However, these materials weren't strong enough to support buildings much higher than ten stories. In 1855, a process was invented to make steel that was extremely strong and inexpensive. This steel could be used to make beams and columns that supported very tall buildings.



Steel beams and columns

Another invention that made skyscrapers possible was the passenger elevator, developed in 1852. Elevators allow people to quickly and safely ride up to higher floors.

