A state of the means ready to th

Illustrated by Nasan Hardcastle

Written by Annie Somers

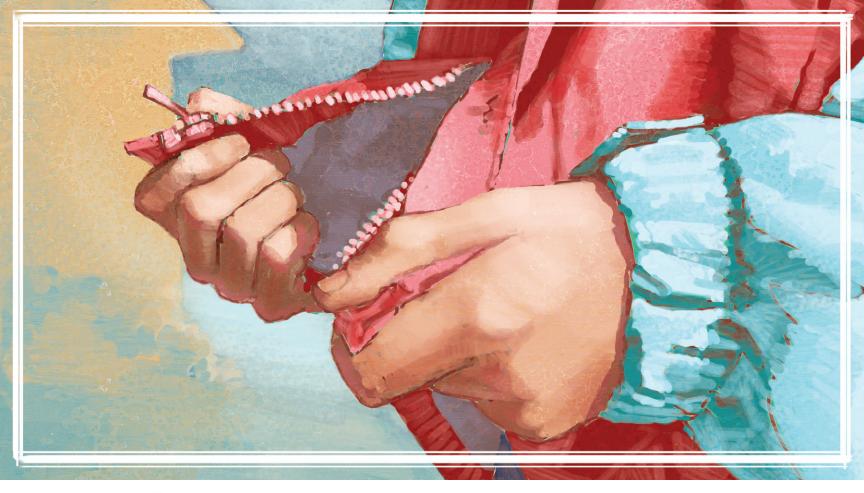




My name is Clara. I've been learning about inventions in school. Today my school is having an invention fair. Since I made an invention, I'm an inventor. All my friends love what my invention makes, so I think my invention will be famous one day. Some inventions took years to become famous, so I won't be discouraged if it takes a while.

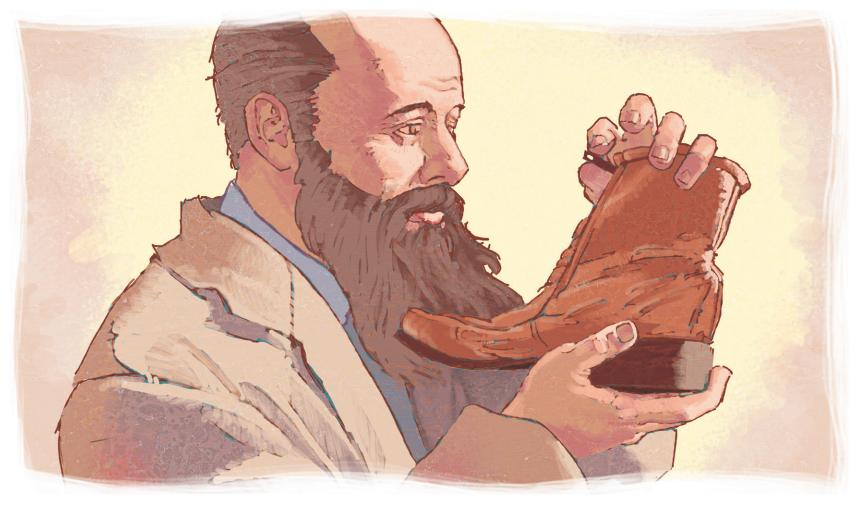


3





Sometimes an invention doesn't succeed right away. Sometimes a person invents something, then other people make it better. That's what happened to zippers.



Whitcomb (WHIT-cum) Judson invented the zipper. He used it to fasten his boots.

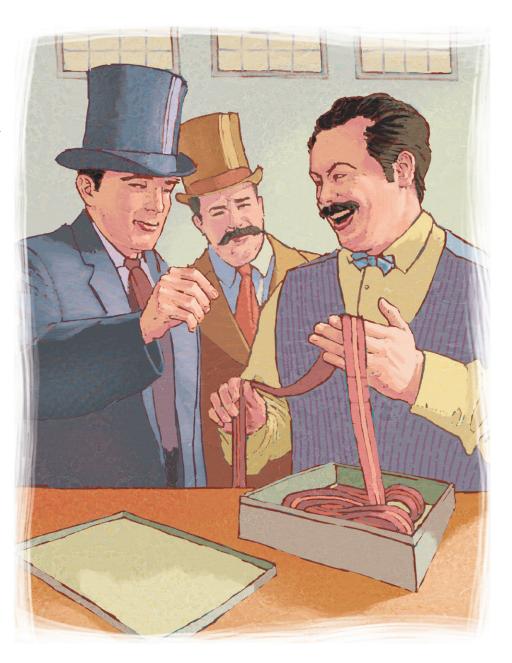


Whitcomb took his zipper to the 1893 World's Fair in Chicago. But Whitcomb's zipper was hard to use.



The zipper jammed a lot. Its hooks and eyes were hard to keep together. Most people at the fair ignored his invention.

Gideon Sundback improved the zipper. He changed the hooks and eyes into teeth that stayed together better. His zipper had more fasteners than Whitcomb's. His zipper looked like today's zippers.





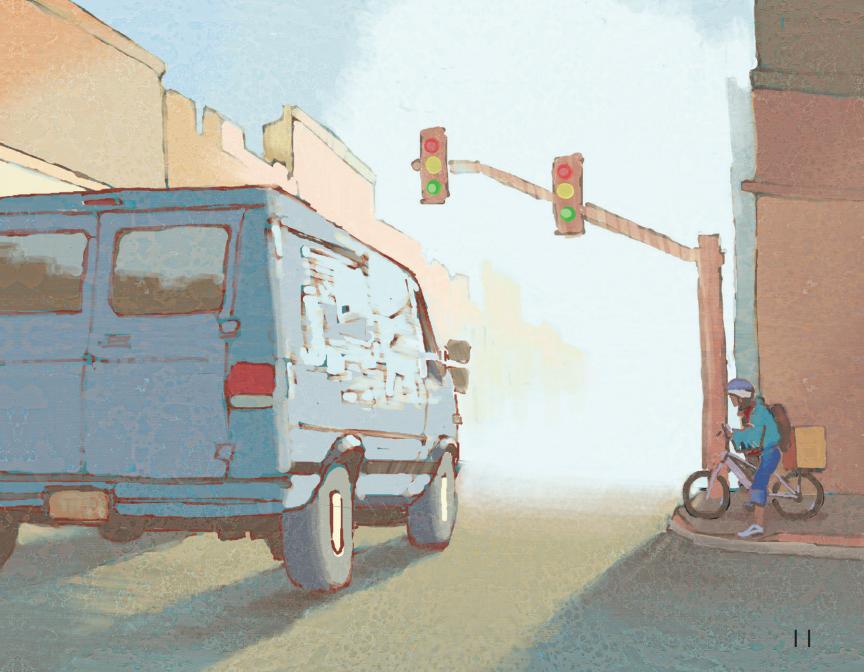
Zippers are now used in clothes like my jacket. We call it a zipper because that's the sound it makes. It goes *zzzzzi*p.

Now, let's go to the invention fair!



This road is busy! See the traffic signal? Without it, drivers wouldn't know when to stop.

10



Long ago, streets were very dangerous. Bikes, cars, wagons, and people all shared the street. One day Garrett Morgan saw a car and a wagon crash. He wanted to make the roads safer, so he made a new, better traffic signal.





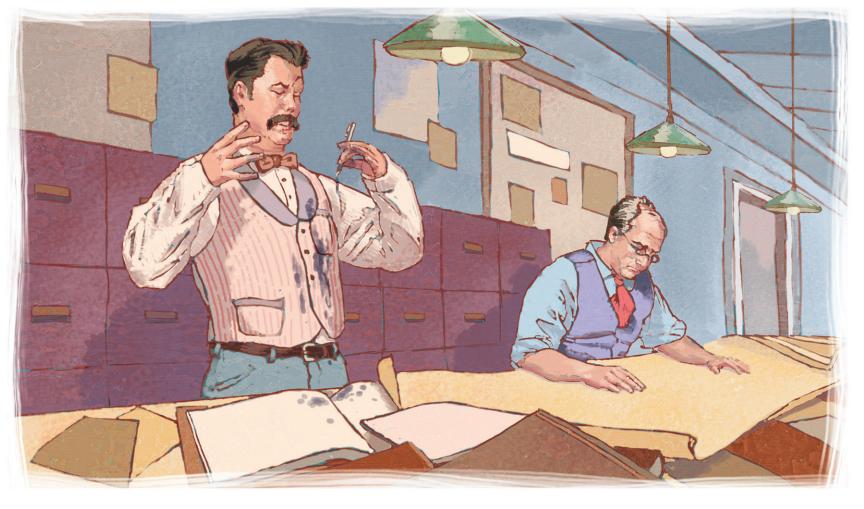
Garrett's traffic signal was shaped like the letter *T* with the words *Stop* in red and *Go* in green. It also had a yellow light to warn people when it was almost time to stop. Thanks to Garrett's invention, there were fewer accidents.





Since my invention has so many parts, I used a ballpoint pen to draw the plans.



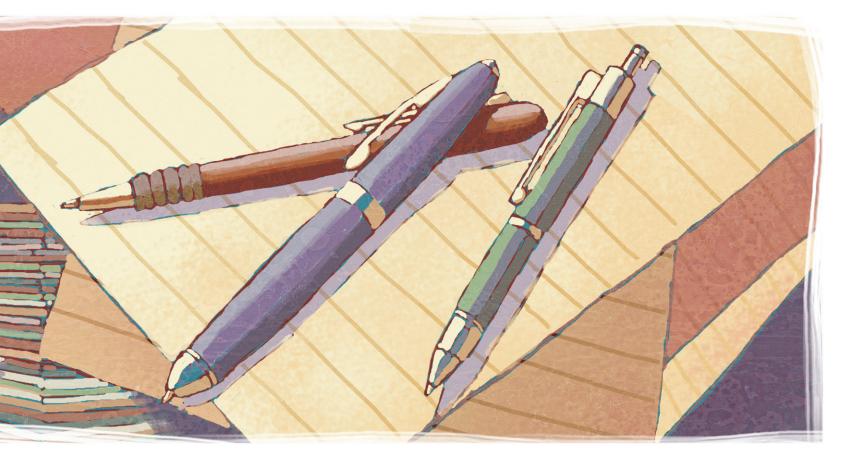


Did you know that before ballpoint pens, people used fountain pens? The pens leaked and the ink didn't dry very fast, so people often got ink all over their fingers and clothes.



Ladislao (LAHS-zlo) Biro (BEE-ro) knew he could make a better pen.

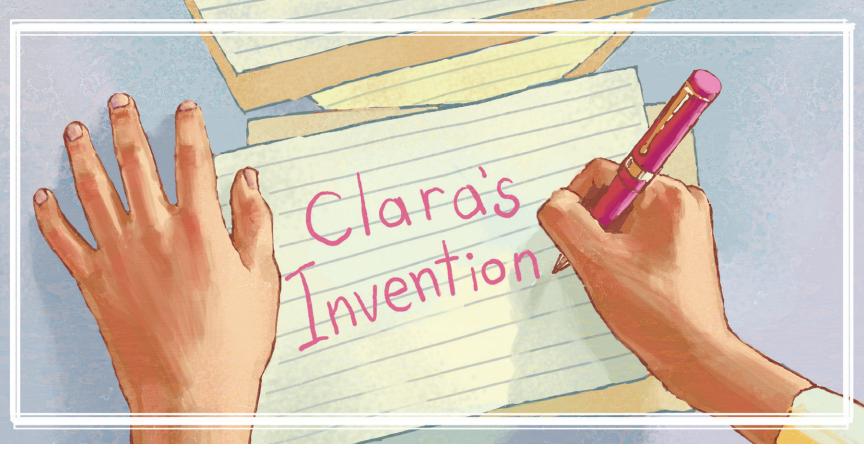




Ladislao worked for a magazine. He noticed the ink used to print the magazines dried fast. So he invented a tube to hold the ink. At the bottom of the tube, a little ball rolled the ink onto paper. The ink dried fast and didn't smudge.



The ballpoint pens were first used during the Second World War. Fountain pens leaked at high altitudes because the air pressure was low. Ladislao's pens didn't leak, so pilots used them.



Ladislao's pens were very popular. They were easy to carry around and didn't leak. Today everyone uses ballpoint pens—even me!







Now you can see what I invented. My invention makes peanut butter and jelly sandwiches. And because my friends eat so many, I think my invention should catch on pretty fast!

Math & Science

Inventions

Copyright © Waterford Institute, Inc.

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

Published and distributed by Waterford Institute, Inc., Sandy, Utah.

Waterford.org seeks to blend the best aspects of learning science, mentoring relationships, and innovative technologies to form community, school, and home programs that deliver excellence and equity for all learners.

Printed in the United States of America.

ISBN 978-1-4256-0353-3

Waterford™, Waterford Institute™, Waterford A Nonprofit Research Center™, Waterford.org™, Light Atom logo*, Rusty and Rosy*, Waterford Early Learning (Lgon*, Waterford Early Learning Iogo™, Waterford Reading Academy™, Waterford Early Reading Program*, Waterford Early Reading Program logo*, Waterford Early Math and Science™, Waterford Early Math & Science Iogo™, Waterford Early Learning: Reading™, Waterford Early Learning: Math & Science™, Waterford Early Learning: Classroom Advantage™, Waterford Early Learning: SmartStart™, Waterford UPSTART™, WACS™, Camp Consonant*, and Curriculet™ are trademarks of Waterford Institute, Inc. in the United States and other countries and are used pursuant to a license with Waterford Institute, Inc.

