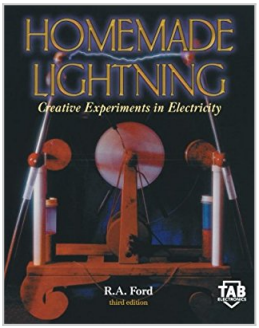


# Homemade Lightning: Creative Experiments in Electricity

*By R. Ford, Richard Ford*



**Homemade Lightning: Creative Experiments in Electricity** By R. Ford, Richard Ford

One of the best books on electrostatics for the hobbyists, inventor, or experimenter is updated and expanded to include newly uncovered information on electrostatic generators and complete instructions for building various types, including Wimshurst and Van de Graaff generators. Throughout the book, the author provides hard-to-find information on electrical anomalies, which represent the frontier of electrostatic research.

Covering theory and presenting electroscope and other construction projects and experiments, this handbook also includes experiments with electrohorticulture, gravitation and electricity, cold light, and electric tornadoes. Homemade Lightning is both an excellent first book for the building electrical experimenter and a superb book for accomplished experimenters who haven't spent much time with electrostatics.

# Homemade Lightning: Creative Experiments in Electricity

*By R. Ford, Richard Ford*

**Homemade Lightning: Creative Experiments in Electricity** By R. Ford, Richard Ford

One of the best books on electrostatics for the hobbyists, inventor, or experimenter is updated and expanded to include newly uncovered information on electrostatic generators and complete instructions for building various types, including Wimshurst and Van de Graaff generators. Throughout the book, the author provides hard-to-find information on electrical anomalies, which represent the frontier of electrostatic research.

Covering theory and presenting electroscope and other construction projects and experiments, this handbook also includes experiments with electrohorticulture, gravitation and electricity, cold light, and electric tornadoes. Homemade Lightning is both an excellent first book for the building electrical experimenter and a superb book for accomplished experimenters who haven't spent much time with electrostatics.

**Homemade Lightning: Creative Experiments in Electricity By R. Ford, Richard Ford Bibliography**

- Sales Rank: #552079 in Books
- Published on: 2001-08-29
- Released on: 2001-08-08
- Original language: English
- Number of items: 1
- Dimensions: 9.20" h x .80" w x 7.50" l, .97 pounds
- Binding: Paperback
- 275 pages

## Editorial Review

Review
From January/February 2003 issue

Hands-on high-voltage experimentalists interested in electrostatic machines will love this book. Filled with design plans for building electrostatic generators and various high-voltage components, this book provides the necessary details to construct these devices. Like the first two editions, there are detailed plans describing the construction of a Wimhurst machine. This edition however, details a more simplified but larger and improved version than previously described. There is also now an entire chapter devoted to Van de Graff generators describing the principles of operation, construction, modifications for improvement, and making accessories. There are many illustrations and photos describing the construction of these generators as well as methods for making electroscopes, large capacitors, and an electrophorus. There are many tips and tricks revealed that show how to make various parts like high-voltage corona spheres, shorting rods, and terminals. Other topics include electrostatic motors, cold light, levitation, exploding wire experiments, and historical notes on unusual electric discharges. A revised bibliography and materials supplier list also made in this new edition.

Anyone with an interest in high-voltage electrostatics will find this book to be not only a "cookbook" for designing and building high-voltage generators but also an historical account of the Wimhurst and Van de Graff generators.

From January/February 2003 issue. .

Hands-on high-voltage experimentalists interested in electrostatic machines will love this book. Filled with design plans for building electrostatic generators and various high-voltage components, this book provides the necessary details to construct these devices. Like the first two editions, there are detailed plans describing the construction of a Wimhurst machine. This edition however, details a more simplified but larger and improved version than previously described. There is also now an entire chapter devoted to Van de Graff generators describing the principles of operation, construction, modifications for improvement, and making accessories. There are many illustrations and photos describing the construction of these generators as well as methods for making electroscopes, large capacitors, and an electrophorus. There are many tips and tricks revealed that show how to make various parts like high-voltage corona spheres, shorting rods, and terminals. Other topics include electrostatic motors, cold light, levitation, exploding wire experiments, and historical notes on unusual electric discharges. A revised bibliography and materials supplier list also made in this new edition.. .

Anyone with an interest in high-voltage electrostatics will find this book to be not only a "cookbook" for designing and building high-voltage generators but also an historical account of the Wimhurst and Van de Graff generators.

From the Back Cover
*****RAVE ONLINE REVIEW!...

"Wimshurst Machine and other wonderful information. This is a must-buy book for the electrical experimenter and science/physics educator. Very well-written with unusual and unexpected material.

Beautifully illustrated. Great plans for Wimshurst machine to make 14 inch sparks! Kinetic gravity and countergravitation experiments/information and more!"

"Modern, detailed view of mysterious subject. This is an area of science that seems neglected, hidden in the back room of the 'mad scientist.' However, this book details both traditional and modern means of obtaining, using, measuring & studying aspects of static electricity... All in all, a very informative, even enjoyable read for anyone interested in high-voltage electrostatics."

"An indispensable guide to anyone interested in starting out in electrostatics. It gives a wonderful overview of the principles involved, and takes the reader on a thorough tour of how to go about building both sectorless-Wimshurst and Van de Graaff generators. A must-have for electrostatic enthusiasts."

Build a Wimshurst generator or modify your Van de Graaff for creative, hands-on experiments--explore the wide-open frontiers of electrostatics.

Enter the wide-open frontier of high-voltage electrostatics with this fascinating, experiment-filled guide. You'll discover how to make your own equipment, how electricity is used in healing, and the workings of many experiments in high potential physics! Starting with electrostatic basics, R.A. Ford's highly praised Homemade Lightning entertains, instructs, and challenges. It's the only comprehensive electrostatics book packed with useful projects for serious hobbyists, students, inventors, and experimenters!

LOADS OF FASCINATING EXPERIMENTS AND ILLUSTRATIONS

Perfect for beginning electrical experimentation or advancing an interest in electrostatics, Homemade Lightning takes you through electrostatic generator construction and operation to prepare you for a number of unusual projects. Inside, you'll find a complete description of several types of generators, including the Wimshurst and Van de Graaff, plus specific details for experiments with

* Electroscopes
* Electrohorticulture
* Electroaerodynamics
* High-voltage capacitators
* Countergravitation
* Cold light
* Electric tornadoes
* And more

FROM THE PAST TO THE FUTURE

Featuring beautiful illustrations from turn-of-the-century science journals of Victorian-era electrostatic generator designs, Homemade Lightning provides hard-to-find information on electrical anomalies--the key to the future of electrostatic research. This is a book that everyone interested in the mystery and power of lighting will treasure.

About the Author

R.A. Ford is an electrical experimenter and inventor specializing in turn-of-the-century electrostatic devices. An avid researcher, he developed his own electrostatic generator, which is detailed in the book. Ford also has served as a technical consultant to manufacturers of Wimshurst and Van de Graaff generators. For many years, he has devoted himself to introducing students of all ages to the science and history of electricity. For the past five years, he has worked to develop high voltage equipment for use in high school science fair projects as well as in physics labs and lectures.

## Users Review

**From reader reviews:**

**Joann Hamilton:**

Have you spare time for any day? What do you do when you have a lot more or little spare time? Yep, you can choose the suitable activity intended for spend your time. Any person spent their spare time to take a stroll, shopping, or went to the Mall. How about open or perhaps read a book allowed Homemade Lightning: Creative Experiments in Electricity? Maybe it is to be best activity for you. You know beside you can spend your time along with your favorite's book, you can more intelligent than before. Do you agree with its opinion or you have some other opinion?

**Henry Robinson:**

This book untitled Homemade Lightning: Creative Experiments in Electricity to be one of several books which best seller in this year, here is because when you read this guide you can get a lot of benefit onto it. You will easily to buy this specific book in the book retailer or you can order it by way of online. The publisher in this book sells the e-book too. It makes you quicker to read this book, since you can read this book in your Touch screen phone. So there is no reason for you to past this publication from your list.

**Louetta Cantrell:**

The publication with title Homemade Lightning: Creative Experiments in Electricity has lot of information that you can study it. You can get a lot of advantage after read this book. That book exist new expertise the information that exist in this reserve represented the condition of the world now. That is important to yo7u to be aware of how the improvement of the world. That book will bring you inside new era of the globalization. You can read the e-book on the smart phone, so you can read this anywhere you want.

**Julio Huntsman:**

You can find this Homemade Lightning: Creative Experiments in Electricity by check out the bookstore or Mall. Just viewing or reviewing it can to be your solve issue if you get difficulties for ones knowledge. Kinds of this publication are various. Not only through written or printed and also can you enjoy this book by simply e-book. In the modern era like now, you just looking of your mobile phone and searching what their problem. Right now, choose your personal ways to get more information about your e-book. It is most important to arrange yourself to make your knowledge are still change. Let's try to choose appropriate ways for you.

# Experiments in Electricity By R. Ford, Richard Ford #L0PB9G5RNOK

# Read Homemade Lightning: Creative Experiments in Electricity By R. Ford, Richard Ford for online ebook

Homemade Lightning: Creative Experiments in Electricity By R. Ford, Richard Ford Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Homemade Lightning: Creative Experiments in Electricity By R. Ford, Richard Ford books to read online.

## Online Homemade Lightning: Creative Experiments in Electricity By R. Ford, Richard Ford ebook PDF download

### Homemade Lightning: Creative Experiments in Electricity By R. Ford, Richard Ford Doc

**Homemade Lightning: Creative Experiments in Electricity By R. Ford, Richard Ford Mobipocket**

**Homemade Lightning: Creative Experiments in Electricity By R. Ford, Richard Ford EPub**

**L0PB9G5RNOK: Homemade Lightning: Creative Experiments in Electricity By R. Ford, Richard Ford**