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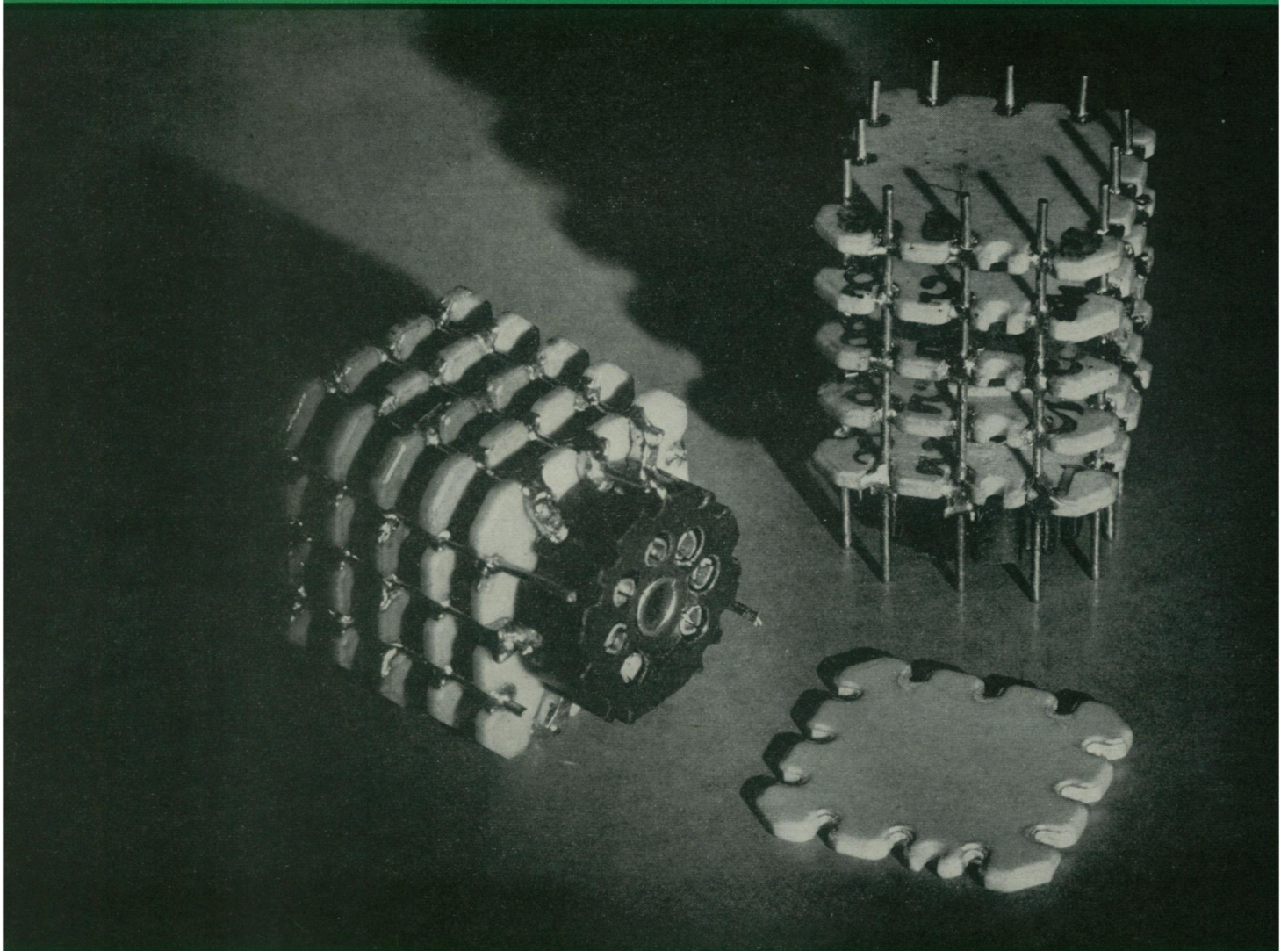
October 3, 1953

VOL. 64, NO. 14 PAGES 209-224

SCIENCE NEWS LETTER

®

THE WEEKLY SUMMARY OF CURRENT SCIENCE



Electronic Tinkertoys

See Page 211

A SCIENCE SERVICE PUBLICATION

**A
NEW
TWIST**

**IN
TELEPHONY**

For years the accepted way to connect wires to telephone apparatus was with solder. Now, Bell Laboratories engineers have discovered how to make connections faster and better—without solder.

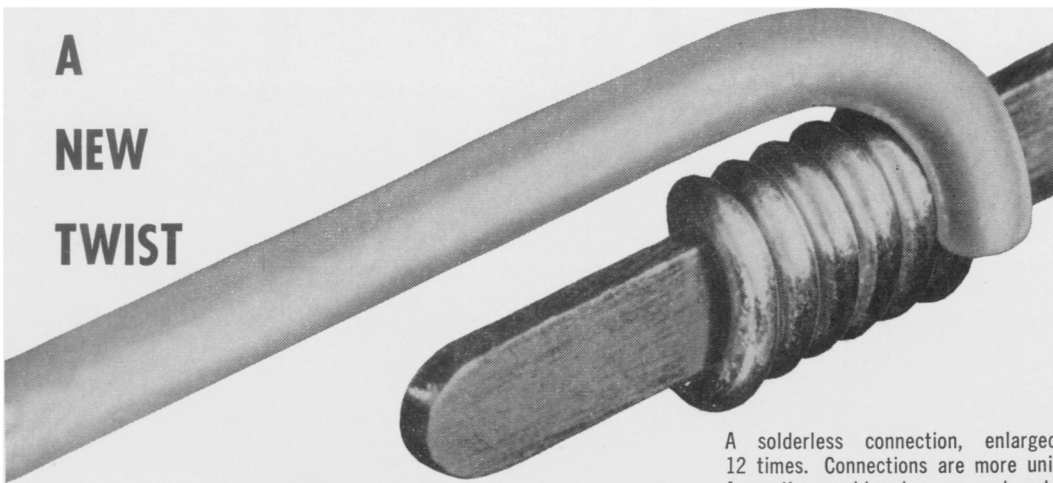
Solder, they reasoned, wouldn't be needed if wire and terminal could be kept tightly pressed together. But, for economy, this had to be done with the wire alone—without complicating screws and springs.

They found the answer in using a properly dimensioned terminal with sharp edges . . . whipping the wire around it under high tension. The terminal bites into the wire, locking it securely into position. Thereafter the squeezed edges maintain a contact pressure of at least 15,000 pounds per square inch—even under vibration that cracks soldered joints.

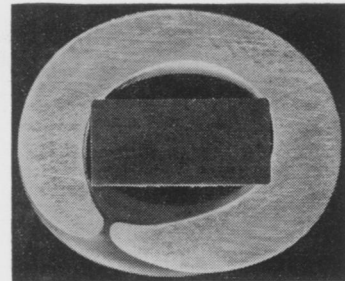
The new connections can be made in half the time—a big money-saver in the billion connections that Western Electric makes each year for the Bell System. It's another example of the way Bell Telephone Laboratories works continually to keep costs low.

BELL TELEPHONE LABORATORIES

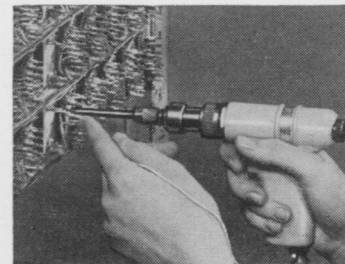
IMPROVING TELEPHONE SERVICE FOR AMERICA PROVIDES CAREERS
FOR CREATIVE MEN IN MECHANICAL ENGINEERING



A solderless connection, enlarged 12 times. Connections are more uniform than soldered ones and only half as bulky.



Cross section of solderless connection. Note terminal biting into wire. In a six-turn connection there are at least 20 clean contact areas impervious to moisture and corrosive gases, and offering a low resistance path for current.



Power tool whips wire on terminal in fraction of a second. There is no heat which could damage miniature components . . . no dropped solder or wire clippings to cause trouble later on.

WHERE DO YOU WANT TO GO?

France? Brazil? West Indies? Hawaii? Canada? Round the World?

DISCOVER THE SECRET OF LOW COST TRAVEL

Stop saying that travel is too expensive. Passenger-carrying freighters are the secret of low cost travel.

For no more than you'd spend at a resort, you can take a never-to-be-forgotten cruise to Rio and Buenos Aires. Or through the Canal to either New York or California. Or to the West Indies or along the St. Lawrence River to French Canada. In fact, trips to almost everywhere are within your means.

And what accommodations you get: large rooms with beds (not bunks), probably a private bath, lots of good food and plenty of relaxation as you speed from port to port.

Depending upon how fast you want to go, a round the world cruise can be yours for as little as \$250-\$300 a month. And there are shorter trips. Fast, uncrowded voyages to England, France, the Mediterranean; two or three week vacations up and down the Pacific Coast or to New Orleans.

Name the port and the chances are you can find it listed in "Travel Routes Around the World." This is the book that names the lines, tells where they go, how much they charge, briefly describes accommodations. Hundreds of thousands of travelers all over the world swear by it. Travel editors and travel writers say "To learn how to travel for as little as you'd spend at a resort get 'Travel Routes Around the World.'"

The big 1953 edition is yours for \$1, and your dollar also brings you this priceless report:

FREIGHTER LIFE. What vagabond voyaging is all about. Plenty of photos.

A big \$1 worth. Send for your copies of both guides now. Simply fill out coupon.

Bargain Paradises of the World

Do you know where to find an island right near the U. S. so nearly like Tahiti in appearance, beauty, and color even the natives say it was made from a rainbow? (And that costs here are so low you can not only reach it but also stay a while for hardly more than you'd spend at a resort in the U. S.)

Do you know where to find the world's best mountain hideaways or its most dazzling surf-washed coastal resorts, where even today you can live for a song?

Do you know where it costs less to spend a while, the surroundings are pleasant, and the climate well nigh perfect in such places as Guatemala, Mexico, the West Indies, Peru, France, along the Mediterranean, and in the world's other low cost wonderlands?

Or if you've thought of more distant places, do you know which of the South Sea Islands are as unspoiled today as in Conrad's day? Or which is the one spot world travelers call the most beautiful place on earth, where two can live in sheer luxury, with a retinue of servants for only \$175 a month?

Bargain Paradises of the World, a big new book with about 100 photos and 4 maps, proves that if you can afford a vacation in the U. S., the rest of the world is closer than you think. Authors Norman D. Ford and William Redgrave, honorary vice presidents of the Globe Trotters Club, show that the American dollar is respected all over the world and buys a lot more than you'd give it credit for.

Yes, if you're planning to retire, this book shows that you can live for months on end in the world's wonderlands for hardly more than you'd spend for a few months at home. Or if you've dreamed of taking time out for a real rest, this book shows how you can afford it.

In any case, when it can cost as little as \$24.50 from the U. S. border to reach some of the world's Bargain Paradises, it's time you learned how much you can do on the money you've got. Send now for **Bargain Paradises of the World**. Price \$1.50. Use coupon to order.

WHAT MISTAKES IN DRIVING DO YOU MAKE?

CAN you start a wet motor, take curves without rubbing off miles of rubber, get juice from a battery that seems dead, put out a fire beneath the hood, start on ice without spinning the wheels, pull out of a skid without whirling into approaching traffic?

What common mistakes do you make on flooded roads, on icy hills? What do you do when a car darts out at you from a side road? Do you know how to stop a car **FASTER** when emergency demands you stop on a dime? Do you know how to avoid a sideswipe, pass a truck crawling up a hill, even what to do in that split second you can act when a head-on collision seems inevitable? Do you **KNOW** what to do or will you do the first thing that comes to mind in that moment of panic?

Are you sure your wife knows what to do—that she can handle the car in any emergency? That your grown-up son or daughter can?

Frank Williams' big new book, **How to Drive—and Stay Alive**, tells you the driving errors to watch out for, the good advice to remember. This is the practical guide to safeguard anyone who drives from trouble on the road, from expensive delays, from emergencies of any kind—and from Sudden Death.

Based on the experiences of America's professional drivers, this book is packed with facts, lessons, and practical advice to save your time, your car, your money—and your life.

Name the driving problems, and in this new big book you'll find the answer: everything from how to get your car rolling if you have road trouble to how to save money on maintenance, insurance, tires, etc., how to buy a new or used car without being "stuck," and more hints than most people pick up in a lifetime on how to avoid the hazards of the road and what to do in every emergency.

When you drive, tomorrow may always be too late. So order today. Price only \$2. Use coupon below.

If \$2 was all that anyone asked to help you in any emergency, that would be cheap insurance. So when you're told that **How to Drive and Stay Alive** costs only \$2 and gives all the following information besides, you know this is a book you've got to own:

- How to open your car if you're locked out, what engine noises mean, how to avoid dirty oil, push up gas mileage 3 or 4 miles a gallon, get rid of stains, protect yourself against tire theft, even how to make minor repairs.

- 110 point check-list that just about guarantees you'll get a really good used car, which won't need immediate repairs and will run economically for years. How to avoid hidden costs in your purchase order and installment contract. Simple clean-up steps that can boost the trade-in value of your car a hundred dollars.

- **SPECIAL FOR WIVES:** A whole section on **How to Be a Better Driver Than Your Husband**.

FILL OUT AND SEND AT ONCE FOR QUICK DELIVERY

Mail to
HARIAN PUBLICATIONS, 26 Third Ave.
Greenlawn (Long Island), New York

I have enclosed \$..... (cash, check, or money order). Please send me the books checked below. You will refund my money if I am not satisfied.

- BARGAIN PARADISES OF THE WORLD. \$1.50.
- TRAVEL ROUTES AROUND THE WORLD and FREIGHTER LIFE. \$1 for both.
- HOW TO DRIVE—AND STAY ALIVE. \$2.
- NORMAN FORD'S FLORIDA—where to retire, vacation, get a job, open a business, buy a home. \$2.
- SPECIAL OFFER: All four books above for \$5.*

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Address.....

City & State.....

(Advertisement)

A Shopping Tour Around the World For Only \$2.00 a Month!



Armchair adventurers take magic carpet trips to the four corners of the earth on exciting shopping sprees for only \$2.00 a month!

By Norma Bruce

EVERY month, thousands of adventure-loving Americans receive mysterious looking parcels, enclosed in exotic wrappings and plastered with foreign stamps. These packages come all the way from India, Africa, France, Egypt, Japan, England, Norway . . . or some out-of-the-way place you've never dreamed of!

The contents are always a complete surprise. One month, the postman may deliver a curious looking package containing an exquisite example of handwrought silver from the Far East . . . at another time, a wood-carving from sunny San Marino . . . or, a piece of Florentine sculpture from the birth-

place of the Italian Renaissance . . . or again, a shimmering, pure silk *sari* from India, traditional article of clothing for the Hindu *Mabaranees*. Each new gift brings these "armchair travelers"—members of the unique *Around-the-World Shoppers Club*—a greater thrill than the last. For whatever the surprise package may be . . . no matter from what far corner of the earth it comes . . . the gift is invariably beautiful . . . chosen with taste . . . a superb example of traditional craftsmanship!

Membership Costs Just \$2.00 Per Month

Members of the *Around-the-World Shoppers Club* receive these gifts for only \$2.00 (and even less) per month. There are good reasons for this: the magic of the American dollar (foreign countries are eager for dollar credits) enables the Club to purchase fine foreign products at a fraction of their cost in this country. But that's not all. Even if an American tourist with his pockets stuffed with dollars were to tour the foreign countries in person, he still couldn't match the low Club prices. Huge membership means huge buying power. In many instances, the Club absorbs the *entire output* of a foreign artisan's studio over a long period of time. Tremendous savings are made by such large-scale buying. These savings are passed on to Club members.

Club Representatives Know "All the Angles"

In addition, the men who represent the Club abroad are trained, professional buyers. They are familiar with the market places of the world! They visit the great international fairs. They are acquainted with out-of-the-way places the average traveler never heard of. In short, they know where to discover

the hard-to-find, the unique, the outstanding buys.

These experts—to the further advantage of Club members—study the ups and downs of foreign markets. Recently, for example, the Greek drachma fell 50% in value. Immediately, a Club representative flew to Athens. He visited the leading artisans of the country . . . finally uncovered a gift of rare beauty that could be sent to members for \$2.00. If purchased a month earlier, this same article would have cost \$4.00. If imported for sale in American shops, its price might have ranged from \$5 to \$10!

Gifts Are Intriguingly Different and Useful

Many American travelers return home from abroad with trunkloads of useless, high-priced "tourist trinkets." Not so these arm-chair travelers who belong to the *Around-the-World Shoppers Club*! They are receiving beautiful articles for the home, valuable decorative pieces, personal items they can use every day of their lives. And there is something for every member of the family—young and old. The Club is careful to select gifts that are *unusual and practical*—items that are seldom seen in American shops—articles that will give a lifetime of service and pleasure. Every gift represents the best of native art and craftsmanship. Many are made entirely by hand. Fine glassware, metalware, costume accessories, sculptured alabaster, laces, ceramics . . . these are but a few of the typical Club selections. Hundreds of unsolicited letters—on file in the American offices of the Club—attest to the extraordinary enthusiasm with which members receive their gifts.

The Case of the Famous Perfume Flacon

The petit Parisian perfume flacon is a good example of how club purchases are made. The Club's buyer in France discovered it in a small Paris studio. When he first saw this little gem of etched metal and glass, he instinctively knew it was "right" for discriminating American women.

So in due time, these hand-made flacons were purchased, packed *à la français*, and mailed direct from Paris. Almost overnight, it became one of the most talked-about items the Club had ever distributed. The mail was tremendous. Thousands of smart American women wrote to congratulate the Club for selecting this delightful *frivolité de Paris*. Incidentally, the same item was later sold in one of New York's exclusive shops for twice the price paid by Club members. This story is typical of dozens of such Club purchases.

How to Join the Around-the-World Shoppers Club

A prospective member may join simply by sending his name and address to the American office of the Club, given below. Membership is free, and there are no charges other than for each monthly gift. All duty and postal charges are prepaid by the Club. (The United States Post Office Department charges 15¢ each for the delivery of small packages from foreign lands which cannot be prepaid.)

The Club may be joined on any of the following plans: 3 MONTHS MEMBERSHIP for \$6.00, 6 MONTHS MEMBERSHIP FOR \$11.50, 12 MONTHS MEMBERSHIP for \$22.00.

Bonus Gift to New Members

The Club also offers each new member a special *Around-the-World Shoppers Club Bonus Gift without charge* when he joins. This gift will be sent from a foreign country as soon as the new member's name is received overseas. The Club asks you to examine the gift carefully. If you decide not to join the Club after all, keep the Bonus Gift anyway. Notify the Club and you will receive a prompt refund of your payment!

You May Cancel Membership at Any Time

The tremendous growth of the *Around-the-World Shoppers Club* in recent months . . . the hundreds of letters from delighted members all over the nation—prove beyond doubt that the "armchair travelers" who belong to the Club know a wonderful bargain when they see one! The minute you unwrap your Bonus Gift from abroad, you will understand why the Club is so popular. You'll be amazed that such gifts can be sold for only \$2.00 each! However, you are free to cancel your membership at any time. (Please give 30 days' notice to allow for transmittal to the Club's offices abroad.) The unused portion of your payment will be refunded in full.

The *Around-the-World Shoppers Club* headquarters in the United States are located at 71 Concord Street, Dept. 209, Newark 5, New Jersey. You may join simply by sending your name and address, together with remittance for the term of membership desired, as explained above. Why not do it now, while an extra gift is being offered without extra charge to all new members.

