

15¢

\$5.50 A YEAR

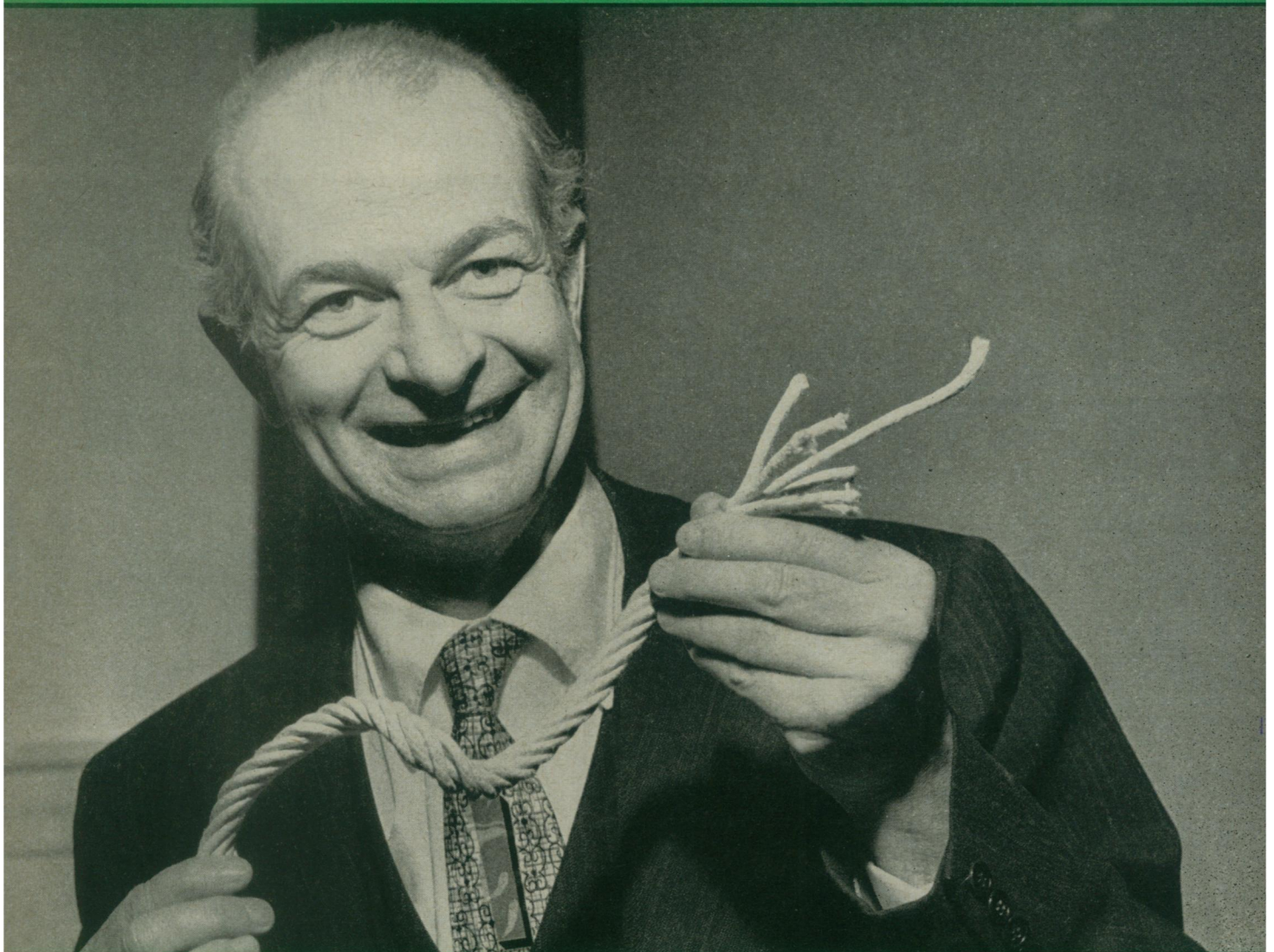
November 13, 1954

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SCIENCE NEWS LETTER

®

THE WEEKLY SUMMARY OF CURRENT SCIENCE



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See Page 307

A SCIENCE SERVICE PUBLICATION

Kodak reports to laboratories on:

pen-and-ink photographs...lowering the dilution limit for alkyd resins...
our contribution to labels that won't smudge

Lines from tones



This was the home of George Eastman, our founder. The 50-room residence is now a world-famous museum of photography. We have not committed the blunder of using the hand of the artist instead of the lens of the camera to depict this shrine of photography. Our purpose here is to point out that photographs can actually be made to look like this. There may even be time between now and Christmas to do your holiday cards this interesting way.

The analytically minded will see at once that we have here a process which, instead of representing the brightness of the elements of the original scene, responds only to brightness *gradients* above a certain magnitude. Be that as it may, there will also be those of a practical turn of mind who will see here a way of saving a lot of expensive line drawing of technical subjects; or a way to photomechanical reproduction of illustrations that skips the half-tone screen.

For details of the procedure write Eastman Kodak Company, Sales Service Division, Rochester 3, N. Y., and ask for the pamphlet "Kodak Line-Tone Process." No charge.

Thin and odorless

Anybody who keeps up with events in the paint and lacquer business knows that the Shell Oil Company is the pre-eminent producer of odorless solvents. Simple business logic

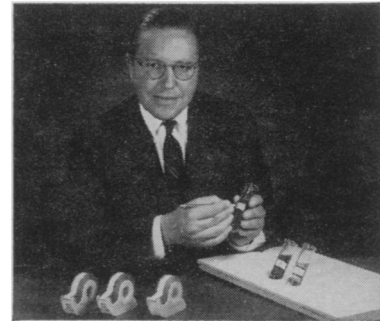
compels them to put a great deal of research into pushing ever upward the properties and therefore the sales volume of odorless alkyd resin paints. One of the principal ways to push upward in that field is to cut viscosity and keep it down during storage so that the paint will be easy to spray and brush. To the uninitiated it might appear that all you need do is use more solvent, which should be perfectly dandy for Shell. It doesn't work that way. You bump into something called the "dilution limit." Dilute more and your alkyd resin kicks out in the form of a gel.

Now a bright lad in one of our sales departments was digesting his lunch one afternoon when his eye fell on an item in *Chemical Week* reporting Shell's finding that mixtures of glycerol mono- and dioleates act as dispersants for alkyd resins in odorless formulations. Since it is the young man's job to sell our *monoglycerides* and since he has faith that a straight mono can do anything a mono-di mixture can do, only better, he called in his young lady forthwith and dictated a letter to Shell. Turned out they hadn't realized that concentrated glycerol mono-oleate, with diglycerides, triglycerides, free fatty acid, glycerine, and soap all wrung out by molecular distillation, was available at around 40¢ a pound as our *Myverol Distilled Monoglycerides, Type 70*.

Which made Shell's invention work better—straight mono or the mono-di mixtures? There followed some earnest comparisons in both our laboratories and theirs. Depression of dilution limit and viscosity were measured with various resin formulations and at various temperatures. Naturally, our straight mono won every race.

If you would like to see the data, write for a copy of "Distilled Monoglycerides as Alkyd Resin Dispersants" to Distillation Products Industries, Rochester 3, N. Y. (Division of Eastman Kodak Company).

Smooth and durable skin



Demonstrating his product here is a customer and Rochester neighbor of ours, Mr. E. B. Brewster, President, Labelon Tape Company, Inc. Mr. Brewster has recently gone national in his distribution. He buys thin-gauge *Kodapak IV Sheet*, combines it with other ingredients, and winds up with a pressure-sensitive opaque tape which he has patented. When you write on it with pencil or typewriter, the writing pops out in dense black, protected from smudging beneath a tough skin that is far too glassy-smooth to pick up dirt. Makes a quickly prepared label for drawers, panel boards, machine parts, laboratory ware, and any other objects to which pressure-sensitive tape will stick.

With the writing safe beneath the outer skin, Labelon can make a strong sales point of its resistance to dirt, oil, water, acids, and the curling and yellowing of age. It is therefore important that the skin should be capable of meeting the claims. That it is. Mr. Brewster could doubtless find a cheaper material that looks like our new .002" cellulose triacetate *Kodapak IV Sheet*. Whether he could match its dimensional stability, flatness, and ability to withstand water and other solvents is enough of a question so that Mr. Brewster doesn't want to risk the reputation of his product on the chance.

Labelon Tape is sold by office and laboratory supply dealers. Kodapak Sheet is sold by Eastman Kodak Company, Cellulose Products Division, Rochester 4, N. Y.

This is one of a series of reports on the many products and services with which the Eastman Kodak Company and its divisions are . . . serving laboratories everywhere

Kodak
TRADE-MARK

HIGH-FIDELITY MUSIC-APPRECIATION RECORDS

TO HELP YOU UNDERSTAND MUSIC BETTER AND ENJOY IT MORE



ON ONE SIDE there is a full performance of a great musical work, featuring orchestras and soloists of recognized distinction in this country and abroad. You listen to this performance first, or afterward, as you desire, and then . . .



ON THE OTHER SIDE is an illuminating analysis of the music, with the themes and other main features of the work played separately with running explanatory comment, so that you can learn *what to listen for*.

A NEW IDEA OF THE BOOK-OF-THE-MONTH CLUB

ALL TOO FREQUENTLY, most of us are aware, we do not listen to good music with due understanding and appreciation. There is no doubt about the reason: we are not properly primed about *what to listen for*. MUSIC-APPRECIATION RECORDS meet this need—for a fuller understanding of music—better than any means ever devised. After hearing several of these records, all the music you listen to is transformed, because you learn in general what to listen for. This highly enjoyable form of self-education can be as thorough as the Music-Appreciation courses given in any university.

YOU SUBSCRIBE BUT TAKE ONLY THE RECORDS YOU WANT . . . A new MUSIC-APPRECIATION RECORD will be issued—for subscribers only—every month. Ultimately

all the great masterpieces of music will be included. The announcement about each forthcoming record will be written by Deems Taylor. After reading this descriptive essay (presented in a form that can be kept for long use) you may take the record or not, as you decide at the time. *You are not obligated as a subscriber to take any specified number of records.* And, of course, you may stop the subscription at your pleasure—at any time!

TWO TYPES OF RECORDS AT A RELATIVELY LOW COST . . . All MUSIC-APPRECIATION RECORDS will be high-fidelity, long-playing records of the highest quality—33 $\frac{1}{3}$ R.P.M. on Vinylite. They will be of two kinds: first, a so-called Standard Record—a *twelve-inch* disc—which will present the performance on one side, the analysis

on the other. This will be sold at \$3.60, to subscribers only. The other will be an Analysis-Only Record—a *ten-inch* disc—priced at \$2.40. The latter will be made available each month for any subscriber who may already have a satisfactory long-playing record of the work being presented. (A small charge will be added to the prices above to cover postage and handling.)

TRY A ONE-MONTH SUBSCRIPTION—NO OBLIGATION TO CONTINUE . . . Why not make a simple trial, to see if these records are as pleasurable and as enlightening as you may anticipate? The first record, **BEETHOVEN'S FIFTH SYMPHONY**, will be sent to you at once—at *no charge*. You may end the subscription immediately after hearing this record, or you may cancel any time thereafter.

As a demonstration
**WILL YOU ACCEPT
WITHOUT CHARGE**



Beethoven's Fifth Symphony

A NEW HIGH-FIDELITY RECORDING BY THE **LONDON SYMPHONY ORCHESTRA**

Norman Del Mar, *Conductor*

Analysis by Thomas Scherman

YOU HAVE HEARD this great work countless times—what have you heard in it? And what may you have failed to hear? This demonstration will show you what you may have been missing in listening to great music.

PLEASE RETURN ONLY IF YOU HAVE A RECORD PLAYER WHICH CAN PLAY 33 $\frac{1}{3}$ R.P.M. LONG-PLAYING RECORDS

MUSIC-APPRECIATION RECORDS R25-11
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345 Hudson Street, New York 14, N. Y.

Please send me at once the first MUSIC-APPRECIATION RECORD, *Beethoven's Fifth Symphony*, without charge, and enter my name in a Trial Subscription to MUSIC-APPRECIATION RECORDS, under the conditions stated above. It is understood that, as a subscriber, I am not obligated to buy any specified number of records, and may take only those I want. Also, I may cancel this subscription after hearing this first record, or any time thereafter at my pleasure, but the introductory record is free in any case.

Mr. }
Mrs. }
Miss } (Please Print)
Address
City..... Zone..... State.....

MAR 1

How to extend Christmas THE WHOLE YEAR THROUGH

FOR THE MOST UNUSUAL PERSON
ON YOUR CHRISTMAS
LIST



Wouldn't he (or she) like a gift of twelve packages, one to arrive each month in 1955?

Twelve Suprises plus another we'll add

IN EACH 1955 gift package, there will be several objects of science, and with each object, a museum-style legend card, which will tell at a glance what these THINGS of science are. Included will be the sheets of explanation, that give the interesting details of discovery, of development, of manufacture, and that tell how to perform unusual experiments with the contents of the package.

Since late in 1940, packages like these have been going forward to members of the THINGS of science group. Glance over this list, then decide whether a membership which brings monthly packages on subjects as widely varied as these, isn't just the thing for that most unusual person on your Christmas Gift list.

- | | | |
|------------------|---------------------|----------------------|
| Mineral Optics | Vegetable Dyes | Taste |
| Unusual Fabrics | Housing Materials | Food Packaging |
| Lodestone | Coffee By-Products | Urea Chemicals |
| Rayon | Fungicides | Wood Identification |
| Coins | Iron Oxide Pigments | Sea Shell |
| Casein | Multi-Layer Wood | Paper Making |
| Rubber Plant | Fingerprint | Nails |
| Spices | Mineral Hardness | Paper Chromatography |
| Sweetness | Kidskin | Motion Picture |
| Steel | New Fabrics | Licorice |
| Coal-By-Products | Polaroid | Fertilizer Chemicals |
| Nylon | Tea | Titanium |
| Home & Office | Optical Illusion | Pyrethrum |
| Insecticides | Highway Safety | Carbon Black |
| Chicle | Crystallization | 1954 Garden |

You know the one who would thank you again and again for such a gift. And if you are not yourself a member, you could hint to someone that you'd like it as a gift yourself.

The 1955 THINGS of science will be unusual; every month's package will be a surprise. A Christmas Membership to THINGS of science will bring the 12 units of 1955, plus an extra unit which we will select and add to your gift with our compliments, to arrive in time for Christmas. We will make out and mail a Christmas card with your name as donor, announcing your gift. Each membership is \$5 a year, postpaid. You will find a handy order coupon below.

Gift from

T-100

MY NAME

STREET ADDRESS

CITY & STATE

Mail this order to THINGS of science, 1719 N St., N.W., Washington 6, D. C. for the 12 units of 1955 plus the extra Christmas unit.

- I enclose \$5.00 for the following
 Please bill me after Christmas

Gift to

PLEASE PRINT

STREET ADDRESS

CITY & STATE

MAKE OUT Christmas Card
TO READ from.....