

THE BEAM

Vol. VII No. 2 • Published Monthly for Employees of Sylvania Electric Products Inc.

FEBRUARY, 1947



TELEVISION AND ITS FUTURE

(See Page 3-6)

EDITORIAL

A GROWING INDUSTRY

So you want to get into television?

The girls at the Emporium Cathode Ray Tube Plant are in on the ground floor of one of America's most glamorous industries. On pages 3 through 6 of this issue are pictures of the Sylvania Cathode Ray Tube Plant in Emporium, Pa. It is on the faces of the television tubes made there that a stream of electrons paints a picture as varied as all of life.

During the war, smaller size cathode ray tubes—

made in great quantity—were used as the radar eye in one of the most dramatic scientific innovations of World War II.

Many may dispute the statement of Mark Orr, Manufacturing Superintendent of the plant, that "In 1950 the television branch of the Company will be its biggest unit," but anyone who has watched a major sports event in the pleasant atmosphere of his own home knows that television has a present as well as a future.

THE UNITED NATIONS AND THE RED CROSS

The community of Great Neck, Long Island, where most of the 3,000 members of the United Nations Secretariat operating at Lake Success are now living, staged a "Welcome United Nations" week last month. Your editor was one of those who took part in the program by inviting two members of the Secretariat for dinner. The official greeting ceremony took place in the local high school.

Our guests, Mr. and Mrs. L., were two Austrians who had fled from Vienna when the Nazi terror advanced on that hapless city. They arrived in France where Mrs. L. took charge of teaching a kindergarten. Her husband was thrown into a French concentration camp as an enemy alien. When the German armies attacked France, Mr. L. was drafted into the French army where his service consisted mostly in making forced retreats of 30 to 35 miles a day. In the meantime, Mrs. L. was leading her kindergarten children overland by foot, freight car and

hitch-hiking away from advancing German armies. Through a miraculous set of coincidences, the two were reunited in Marseilles and through the probably intentional oversight of various border officials who ignored the fact that on one hand both were enemy aliens to the French and that from the German standpoint Mr. L. was a member of the French army, they succeeded in obtaining passage on a U. S. boat from Portugal. Both have since become American citizens. One of the most interesting things is that Mrs. L. remembers as a small child in World War I being fed by the American Red Cross in Vienna. In World War II it was again the American Red Cross that helped save her life through food and other aid which she received in France, which is probably one reason why both Mr. and Mrs. L. were so quick to adopt their new home as their own. The American Red Cross annual campaign now in progress is a truly worthy cause.

On the Beam

SYLVANIA NEWS LETTER

60 million radios. A report from Washington estimates an all-time high of 60,850,000 radios in use in the United States at the close of 1946. This is an increase of 3,000,000 over 1945.

Shortage of natural gas in northwestern Pennsylvania, due to a protracted cold snap, caused a shutdown of the Clarendon Plant on January 22. Emporium, St. Marys and Brookville shut down the night of February 4. Emporium opened up the night of February 10 with the aid of a standby propane gas plant and St. Marys and Brookville opened at the same time on artificial "bottled" gas. Other users of natural gas in the general area were, of course, also affected.

120 young veterans have been hired to do mounting work at the Montoursville Tube Plant because girls are not available.

A freak windstorm picked up an 80-pound sheet of steel roofing, sent it floating "magic carpet-like" through the air, and painfully injured a worker on the warehouse now under construction at the Danvers Fluorescent Plant.

A radar unit has been installed on the Queen Elizabeth by Sylvania's English associate, A. C. Cossor, Ltd. The new "X" Band Radar, made by Cossor, is the most modern navigational instrument that has been put into commercial use. Its fifteen mile effectiveness permits the "Queen" to proceed at full speed through dense fog and darkness. Sylvania representatives inspected the installation and were addressed by England's "Father of Radar," Sir Robert Watson-Watt, consultant to Sylvania Electric and to Cossor, Ltd.

Substantial new engineering contracts are now in process and additional research personnel has been added to carry on the work.

The Wakefield, Massachusetts Plant was closed effective January 1. It was used during the war for radio tube feeder operations for the Salem Loring Ave. Tube Plant. The latter is now manufacturing light bulbs.

A 100% gain in business for 1947 is expected by the International Division, see pages 10 and 11. Last year the International Division also increased its business by 100% over the previous year.

THE SYLVANIA BEAM

SYLVANIA POLICY FILE

No. 202 & 318—Excerpts from the Policy and Standard Practice Manual. These policies are formulated by Sylvania's Management and issued by Industrial Relations.

PROMOTION

1. Wherever possible, promotions will be made from within the Company. Therefore, when job openings occur, consideration will be given to any qualified employees in that plant or activity for whom the opening would be a promotion. If none is available, qualified employees in other locations or activities throughout the Company should be considered before a new employee is hired.

2. Whenever a job is open in the executive, administrative, or professional classification as defined in the Fair Labor Standards Act of 1938, which the plant or department involved is unable to fill from within their own organization, an Employment Requisition and Specification form

is to be prepared and a copy sent to the Supervisor of Employment, Industrial Relations Department, New York. This will enable the Industrial Relations Department to give assistance in determining whether or not jobs can be filled by persons already within our employ.

3. Even in those cases where an understudy is being groomed for the job in accordance with a previously discussed plan, or it is decided to fill the opening from within the plant or department involved, the proposed promotion should be reviewed with the Supervisor of Employment before the announcement is made.

JURY DUTY

1. Whenever employees are called for jury duty and must therefore be absent from work, they will be given time off for the duration of their service as jurors. Employees will be paid as follows during this time.

a. Exempt employees—Continue at full pay. These employees are expected to carry on

their regular duties for the Company during this period so far as it is possible.

b. Hourly and non-exempt employees—The difference between their fees as jurors and their regular week's pay based on forty hours or their regularly scheduled hours, whichever is less.

UNFORTUNATE COMBINATION

To the Editor of The BEAM:

Your article on "College Men" omits mention of Iowa State College which has contributed a number of alumni, including Dr. Bowie and Norman Harvey of the Research Dept., Bob Starek of Huntington, Bud Pleak of Warren, Darwin Kiser, Ben Olson and the writer at Emporium, and probably others.

This omission from such a complete listing as was presented is a bad enough error, but if the mistake lay in combin-

ing us of I.S.C. with those of the University of Iowa, we have been insulted besides. Iowa State College is a land-grant school located at Ames, Iowa. The State University is at Iowa City.

This sounds as if I might be mad about something but I'm not and no offense is intended. Confusion of I.S.C. and S.U.I. is a common error that usually works to the benefit of S.U.I. and makes those of us from I.S.C. burn.

W. A. DICKINSON—Emporium

The Sylvania Beam

Published monthly for all employees of Sylvania Electric Products Inc. Address news and editorial material to the Company's executive offices, 500 Fifth Avenue, New York 18, N. Y. Editor-in-Chief: Elliott W. Robbins. News Editor: Austin Heywood. Corresponding Editors: Margaret Bradstreet, John A. Gilmore, George Manolakis, Verna Dodson, Viola Johnson. Material may be reprinted with credit to "The Sylvania Beam."

TELEVISION



"IN 1950," said Mark J. Orr enthusiastically, "the television branch of the Company will be its biggest unit. You can quote me!"

Maurice I. (Mike) Kahl nodded cautiously, but did not offer to affirm this in print. Instead he turned to an engineer who burst into the office with something about a new formula for coating cathode ray tubes.

Mike Kahl is Engineer in charge of Process Development, and Mark Orr is

It May Soon Revolutionize The Radio Industry, But It's Still Anybody's Guess

Manufacturing Superintendent at Emporium's Cathode Ray Tube Plant. All of Sylvania's cathode ray tubes for television receivers are made there.

Mark belongs to the "optimist school"

of television engineers. In a few years, they say, "video" will make other radio receivers obsolete. On the other side of the fence are those who think it may take ten to twenty years for the infant industry to grow up.

The growth of television has already been stunted by war. Until V-J Day, direct work on television had virtually been abolished. Now that the radio industry has again concentrated attention on it, the youngster has taken a few steps forward. First was the opening of several new television transmitting stations, and the laying of a coaxial cable (video by wire) between Washington and New York. Booster stations are planned for national networks, and Columbia Broadcasting and R. C. A. have demonstrated color television.

With every advance, however, controversy rages stronger up and down the television scene. Color sets, says one radio manufacturer, will make every black-and-white receiver obsolete. His company will not produce until they can market color sets, because the industry will only limp along with the black-and-



THESE ARE THE MEN who see to the production of Sylvania's cathode ray line in Emporium. Standing, left to right: Ross Gessford, Television Engineering Specialist; Fred Larson, Senior Engineer; Mike Kahl and Mark Orr, Senior Engineer in charge of Process Development and Manufacturing Superintendent, respectively. Sitting: Bill Dickinson, Supervisor of Engineering.



ALBERTA ZELASKO and Mrs. Margaret Summerson pour an aqueous suspension of phosphor into the tubes while Fred Larson looks on. The phosphor settles out to form the screen. The liquid is then siphoned out and the cathode ray bulb baked before assembling.



THE COATING HAVING SETTLED onto the face of the tube from the solution (see preceding picture), Gene Coleson examines the tube in this light box to be sure that the screen has no flaws. This operation requires a good deal of experience and training.

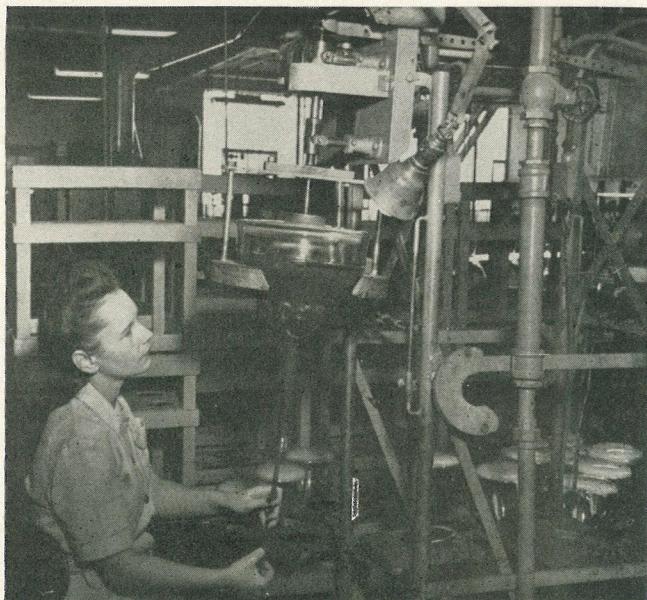
white, while color would insure immediate and sure-fire success. That's silly, say his opponents. Black-and-white is perfectly good, and besides, there is no reason why sets can't be made to receive both.

From the broadcasting companies' point of view, too, television is no fair-

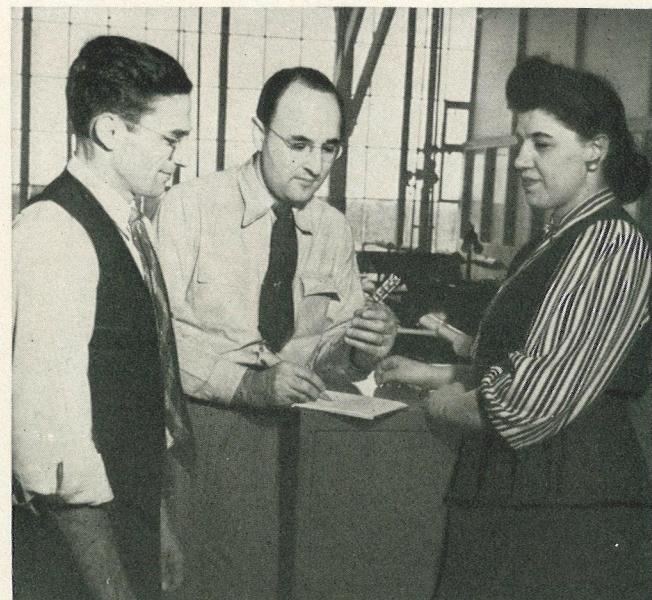
haired boy. Equipment costs huge sums. Visual radio shows good enough to compete with super-colossal movie productions would require super-colossal budgets. Add to this that there are only a few thousand television receivers in the country, and no advertising sponsor is interested. Even if television sets were as

numerous as ordinary sets are now, some doubt if advertising budgets could foot such a bill. Maybe, they suggest, television receivers should be rented instead of sold, thereby providing "box-office" receipts from audiences just like the movies.

These and a hundred other questions



A GRAPHITE COATING is being applied to the sides of a tube by Peggy Jeffers. The graphite is applied by means of a swab, held motionless in the operator's hand while the bulb is rotated on its axis. Peggy must be highly skilled, though the job looks simple.



AN ELECTRON GUN is the center of attraction of this confab, involving, left to right, Paul Civitts, Bill Dickinson, the gun and Frances Bosnik. The ion trap, a part of this gun, was invented by Sylvania's Dr. R. M. Bowie. It prevents burning of the screen.



GUN ASSEMBLIES stand in soldierly array, having been painstakingly inspected for imperfections before being passed on to the next production technician. Final adjustments are made here before sealing the gun to the bulb.

plague the television promoters, but whatever their solution, one thing is certain: the baby has started to walk. A few television receivers are on the market and quite a few are in American homes. New television stations are opening and networks are developing.

For Sylvania, television has meant

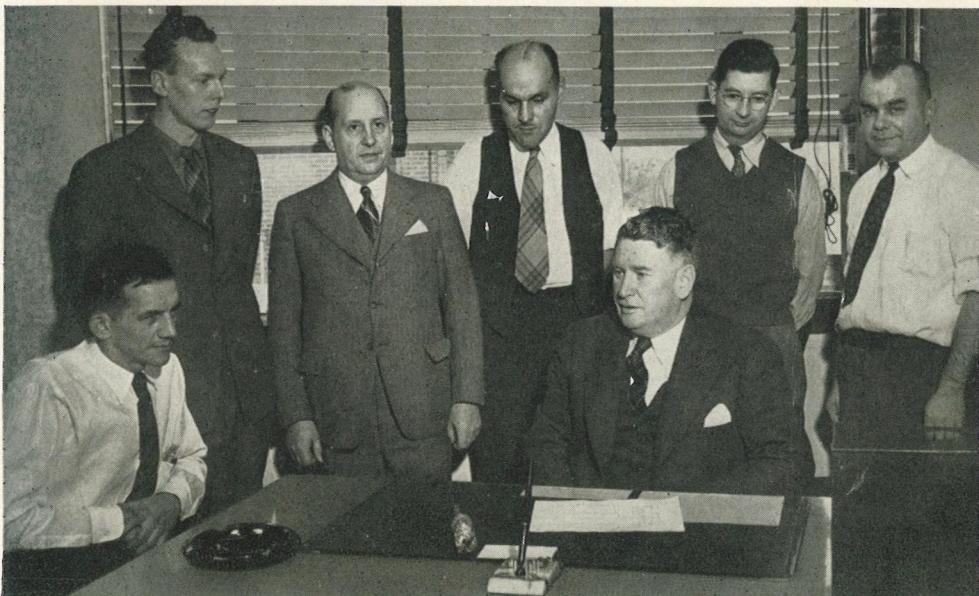
conversion of its facilities for making cathode ray tubes for Army and Navy radarscopes to making the same tubes for receiving sets. During the war the Cathode Ray Tube Plant built 3-inch (diameter), 5-inch and some 7-inch sizes; now it makes 7-inch and 10-inch tubes, the latter in color as well as black-

PRIOR TO EXHAUSTING, the header, to which the ion trap gun is attached, is sealed to the bulb. The gun contains the grid and beam-forming electrodes. Betty Whiting is placing the tubes in position on the machine. Much of the highly specialized equipment used in the Emporium plants is designed and constructed by Sylvania technicians.

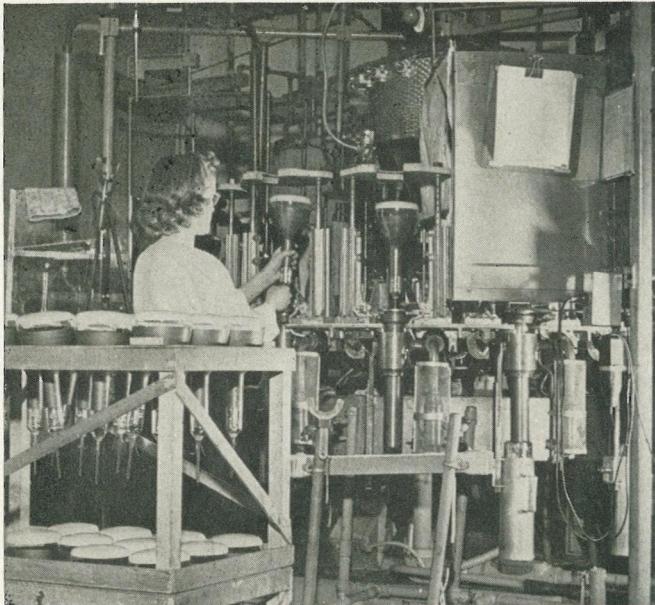
and-white. Later it may build 15-inch tubes. These are actually the "screens" on which television set pictures usually appear.

Sylvania engineers—Dr. Robert M. Bowie, Sylvania's Manager of Research, and Charles Bachman (formerly with Sylvania)—are responsible for developing the "Ion Trap Gun," a major improvement in quality of video pictures which previously were marred by a brown spot burned into the fluorescent coating by the stream of electrons which form the picture. Just as water comes from the nozzle of a hose, electrons shoot from the ion trap gun against the fluorescent coating at the large end of the tube. Their energy is transferred to the powder crystals, causing them to glow with light in varying degrees and form a television picture.

Although it sounds incredible, this tiny electronic stream makes 525 trips across the screen in even, horizontal lines at the rate of 30 times a second—otherwise, 15,750 trips a second—which forms the familiar rectangle of the picture. In other words, it forms 30 complete pictures a second. The human eye retains any image it sees for $\frac{1}{8}$ of a second, and consequently cannot discern any breaks between pictures.



EMPORIUM BRAINSTERS gather to discuss the problems of production. Standing, left to right: Joe Laughlin, Mike Kahl, Larue Regelman, Luther Glantz and Louis Zidar. Seated: Henry Bair and Mark Orr. Seven and 10-inch tubes are made in color and black-and-white.



BETTY WHITING is loading the tubes onto the exhaust machine. The vacuum pumps are located below the rotating table. Each port on the exhaust machine has its own vacuum pump so that if a defect develops in one tube, it will not affect the quality of the others.

It is this tube that Sylvania is making, and that cathode ray tube engineers are now getting ready to produce on a mass-production basis. Its huge size, compared with other Sylvania tubes, requires heavier, more expensive machines. The plant's big rotary exhaust machine is the most costly single piece

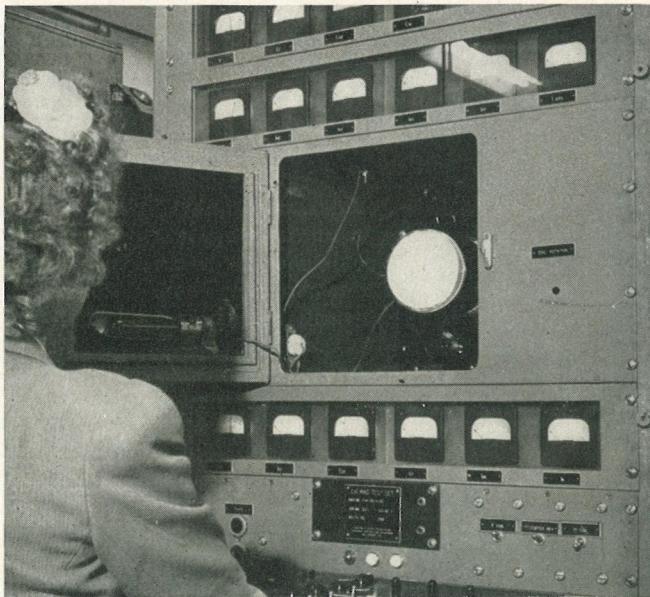
of equipment in the Company—cost: \$48,000 and processes one tube every ten minutes. Planned is an even bigger one—85 feet long—that would cost about \$180,000. It could turn out a tube a minute.

This is necessary, say the engineers, if Sylvania is to compete in the tele-

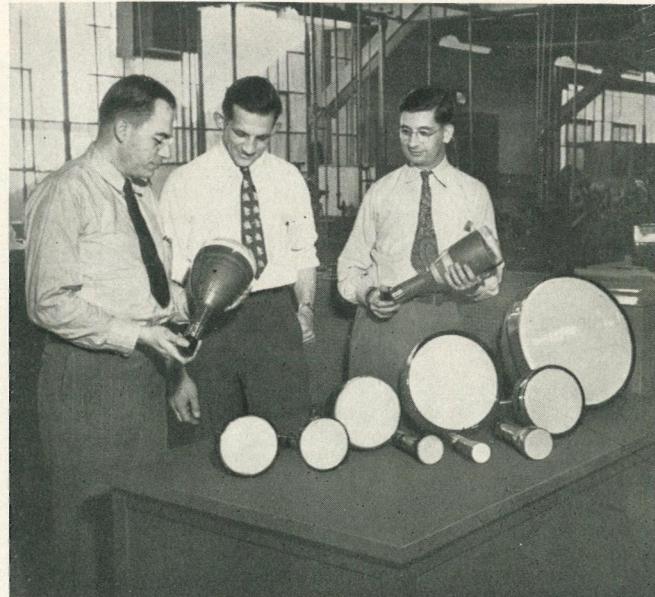


EXACTING TESTS are an essential part of production. Here, Mattie Carlson checks screen brightness with a portable photo cell. This is only one of a large number of tests made on each cathode ray tube in order to insure the highest standard of quality for our customers.

vision market now building up. Tubes that now cost \$35 apiece will cost less when equipment and new manufacturing processes now being developed are perfected. Then, perhaps, Mark Orr's prophecy will come true and television tubes and parts will account for a major portion of Sylvania's sales.



QUALITY IS A BY-WORD! Quality is maintained by subjecting the cathode ray tube to every conceivable test. A forward-looking program of research and development at Emporia and at Sylvania Center on Long Island insures leadership in quality standards. Above: another "final check" made before tube becomes a finished product.



BILL OTTEMILLER, Henry Bair and Luther Glantz inspect the various types of cathode ray tubes manufactured in Emporia. Some of the tubes shown in this picture are types manufactured by Sylvania for the Army and Navy's radar units, one of the most essential weapons of the war, that took the fighting into our enemy's back yard.

ORGANIZATION ANNOUNCEMENTS

MR. HENRY G. HARTWELL has been appointed Supervisor of Product Engineering in the Mill Hall Plant reporting to Mr. W. H. Lamb, Plant Manager.

DR. G. KUCZYNSKI has been appointed to the research staff of the Metallurgical Laboratory at Bayside, according to an announcement by Mr. Walter E. Kingston, Manager. Dr. Kuczynski was formerly a special instructor in the application of *Henry G. Hartwell* quantum mechanics to the electron theory of metals at the Massachusetts Institute of Technology. From 1936 to 1939 he taught at the University of Cracow, later doing work in spectrographic and similar types of metallurgical analyses in England. Dr. Kuczynski has an M.A. degree from the University of Cracow; B. S. from the University of Wales; and Ph.D. from the Massachusetts Institute of Technology. He was the 1945-46 recipient of the Baldwin-Southwark Award for fundamental work on strain gage wires.

DR. IGOR N. ZAVARINE has been appointed to the metallurgical research staff at Bayside. Dr. Zavarine was professor of physical metallurgy at the Massachusetts Institute of Technology from 1930 to 1940, and has a Ph.D. in metallurgy from M. I. T.

MR. WILBUR T. EDDY has been appointed Supervisor of Production Control and Purchasing Agent at the Jamestown Parts Plant.

MR. GERHARD F. CARLSON will succeed Mr. Eddy as Supervisor of the Cost Department. Both Mr. Eddy and Mr. Carlson report to Mr. R. A. Vogt, Plant Superintendent.

Mr. Garlan Morse, General Merchandising Manager, has announced his organization of the following men reporting to him:

MR. GORDON S. HUGHES, Merchandising Manager, Fixtures.

MR. WILLARD S. FERRIS, Merchandising Supervisor, Incandescent Lamps.

MR. TOM GOLDSMITH, Merchandising Supervisor, Special Lamps.

MR. PHILIP A. BLANCHARD, Merchandising Supervisor, Wiring Devices.

MR. FRANK R. ARCHER, Merchandising Supervisor, Fluorescent Tubing.

MR. DONALD K. PHILLIPS, Merchandising Supervisor, Fluorescent Lamps.

MR. JOHN HOLLAND, Product Promotion Supervisor.

MR. DAVID C. LASH, JR., Sales Training Supervisor.

MR. PAUL KEOUGH, Coordinator of Sales Estimates.

MR. FREDERICK R. SMITH, Sales Service Manager.

MR. LOUIS H. STOTT, Sales Auditor.

MR. BEN COTHARIN has been placed in charge of National Accounts in the East Central and certain other divisions now covered by Mr. Ben Dahlin.

MR. GEORGE W. FIELD has been appointed Division Manager of the East Central Division with headquarters in Cleveland.

MR. THOMAS ESPOSIT has been appointed Foreman of the Units Department and Base & Bulb Department at the Monroeville Plant.



George W. Field

MR. GEORGE H. MACKENZIE, formerly Service Supervisor on Wiring Devices, has been appointed a member of the Sales Auditing Department reporting to Mr. Louis H. Stott.

MR. ARTHUR T. MILLEA, formerly Production Control Supervisor of the Wiring Device Plant, has been appointed Service Supervisor on Wiring Devices.

MR. S. B. WILLIAMS, formerly editor of a McGraw-Hill Publishing Company trade magazine, "Electrical World," has been appointed Manager of Customer Relations for the Lighting Division, according to an announcement by Mr. B. K. Wickstrum, General Sales Manager, Lighting.

Mr. Williams also served for a number of years as Assistant Managing Editor of "Electrical World" and had also been editor of "Electrical Record" and "Electrical Contracting." A graduate of Princeton in 1914, he is a member and past President of the Illuminating Engineering Society, a member of the American Institute of Electrical Engineers and a former Director of the Chicago Business Publishers Association.

"SAFETY PUP"



MR. JOHN J. GRESKO has been appointed Manager of the Emporium Receiving Tube Plant and will also be responsible for feeder plant operations.

MR. HERBERT A. EHLERS has been appointed Manager of Product Engineering for the Receiving Tube Division. Both Mr. Gresko and Mr. Ehlers report to Mr. Matthew D. Burns, General Manufacturing Manager, Receiving Tubes.

MR. MICHAEL B. LOG has been appointed Supervisor of Product Engineering for the Emporium Receiving Tube Plant.



John J. Gresko

MR. ALLAN J. PUTNAM has been appointed Supervisor of Quality Control for Emporium Receiving Tube Plant, reporting to Mr. John J. Gresko, Plant Manager.

MR. GEORGE L. LOOMIS has been appointed Section Head of Production Design in the Design and Development section of the General Engineering Department at Emporium. He reports to Mr. N. L. Kiser.

MR. PAUL H. SASSAMAN has been appointed Section Head of the Engineering Service Group for the General Engineering Department at Emporium. He reports to Mr. R. F. Carlson.

MR. HARRY J. KLEIN has been appointed Sales Service Representative for the International Division serving in the Radio Tube Division. Mr. Klein will make his office at Emporium and will report directly to Mr. Walter A. Coogan, Director of the Division.

Harry was formerly Supervisor of Production Planning and recently completed an assignment regarding tube inventories. He has been with Sylvania 13 years, all at Emporium, in various assignments in accounting and production planning.

MR. TONY SERAFINI has been appointed Foreman in charge of the Filament Department in the Brookville Tube Plant. He was formerly in the Grid Department at Emporium.

MR. BRUCE R. JOHNSTON has been appointed Supervisor of Product Engineering and Quality at the Huntington Plant.

MR. WALTER A. WEISS has been appointed Division Manager of Quality Control, reporting to Mr. H. Ward Zimmer.

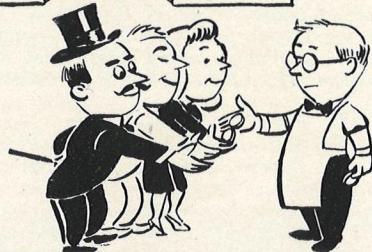
WHO GETS IT?



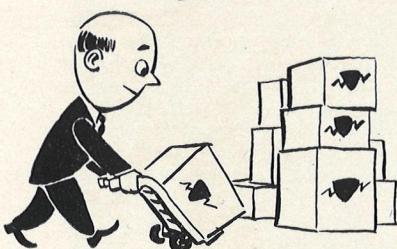
I paid a dollar for some Sylvania products
To keep my house aglow
I asked myself the question,
"Where does that dollar go?"



30¢ goes right away
To the dealer with the store,
Who brings his stock in trade and skill
And service to my door.



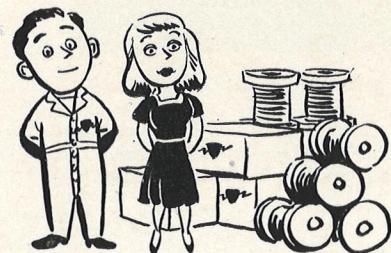
This money he gives out, in turn,
For salaries, rent and all.
He's there right when I need him
And glad to make a call.



16¢ goes to the jobber,
The busy wholesale man,
Who stocks the goods for dealers
And helps them all he can.



Sylvania gets 54¢
Something more than half,
Which pays for all production
And overhead and staff.



Employees at Sylvania
Get 19¢ right here.
Materials take up 18¢
Almost the same, it's clear.



THE DOLLAR

9¢ for manufacturing
Administration and sales expense
Like telephone and overhead,
And all our ads and rents.



4¢ pays for taxes
There's 50 kinds about.
Depreciation takes 1¢
Because machines wear out.

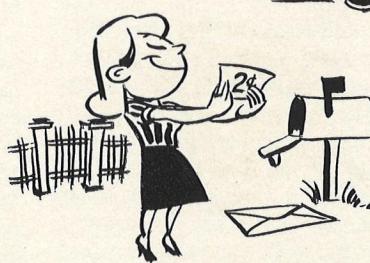


Hey, wait, where's all the profit?
I thought we made big dough.
There's 3¢ of the dollar left,
Now where does that all go?

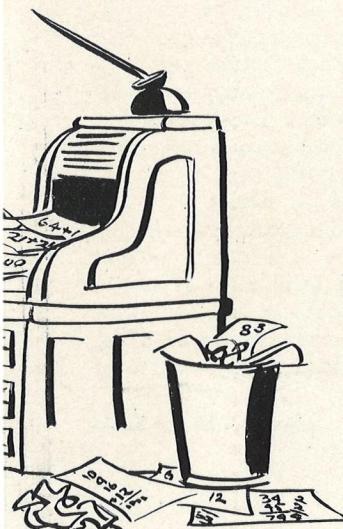


That's right, there's 3¢ profit,
The final statement tells,
On an average dollar's worth of goods
Sylvania makes and sells.

2¢ of this stockholders get
8,000 owners share.
Without the money they put up
Our plants would not be there.



1¢ is reinvested
We keep it cash on hand
Or spend for plants and payrolls
Whenever we expand.



SYLVANIA FOREIGN TRADE BOOMING— COOGAN SAYS EUROPE IS HUNGRY FOR U. S. GOODS

Visited 12 Countries—Notes Devastation,
Finds Paris "Dead"—New Plants Using Fluorescent

SYLVANIA'S FOREIGN TRADE this year will be greater than the entire Company's sales in 1932, Walter Coogan, Director of the Company's International Division, just returned from a European trip, predicts. That means that about 1500 Sylvania production people scattered throughout our 27 plants owe their jobs to the Company's overseas business.

Conditions in the various war-torn European countries make a sad contrast to the United States. Coogan's observations on the business and social conditions in the countries he visited fill half a dozen notebooks.

Accompanied by Ray McClintock, Engineering Manager of the International Division, Mr. Coogan took off October 4 from New York on a Constellation plane. In their passports were visas for all the countries they wished to visit. Before the war, of course, this would not have been necessary as visas were not then required for all countries. Coogan found the trip over speedy but slightly less comfortable than on the Clipper seaplane he took just prior to V-J Day.

Scotch Was Available

The first stop was Lisbon, Portugal. Hotel rates and food charges were about the same as New York in spite of inflation reaching about 300%, with American cigarettes, Scotch and American whiskey readily available. The coal situation, however, was bad. Despite this, the outlook for future business seems excellent for several years. Portugal is now exporting wolfram, wine, sardines and cork. Sylvania business there was excellent.

From Lisbon to Paris is only a matter of six hours by air in spite of the fact that the plane was forced to detour around Spain. Lunch was served picnic style on

the grass at the Bordeaux airport. "Verboten" signs still in evidence served as a grim reminder of the black days France had lived through. Before entering France, Mr. Coogan's money was counted and he had to fill out a form giving full details of currency in his possession. Paris was short of electricity, with many business offices operating in near darkness and the eyes of office workers being badly strained in order to save light. Heat was also scarce and most people were working with their hats and coats on. Prospects for winter were bleak.

Black Market Everywhere

Coogan found the black market operators and tourists made up the major portion of customers in the large cafes. Black market prices for American cigarettes were \$1.50 a pack and nylons \$14 a pair.

To get an import license is a complicated affair. It is first necessary to make out forms in sextuplicate and file them with the Ministry of National Economy. The application then gets a file number. The first question asked, "Is the article made in France?" If so, the industry is then consulted. For example, if the application is for an import license for radio tubes, the radio tube manufacturers in France are consulted, and if they do not object, the license is approved for question one. The second question is, "Does it fit into the country's import program?" This is decided by the Ministry of Industrial Production. They favor raw materials, machinery and parts so manufacturing can be done in France. The third question is, "Are dollars available?" And this is decided by the Ministry of Finance. If a favorable answer is given to the above three questions, the import license is usually granted. Because of the financial

importance of government positions, gangsters are seeking control of many of the bureaus and the nation is passing through a wave of scandals, the chief products affected being flour, gas, textiles and wine.

Paid For Their Napkins

Ration coupons are needed even in restaurants where regular patrons pay 11 francs for their napkin which is stored and reused. A wave of morality has swept over the surface of the city. The Folies Bergere is considerably sub-



H. Eggenberger (center), is Sylvania's distributor of radio and electronic equipment in Switzerland. Left: Ray McClintock. At right: Mr. Coogan.

dued and various criminal sections of the city have been virtually closed up.

A more cheerful picture was presented by Switzerland, reached after a night in a second-class sleeping coach—no first-class accommodations being available. Swiss apartments are less expensive than in the U. S. but equally hard to get. Mr. Coogan was given a meal coupon for three days by immigration officials and a hotel porter secured other coupons good for 14 days, including a supply of soap. Heat for bedroom and bath were available for an extra cost of \$1 a day plus a 15% service charge. Stores were

well stocked but the traditional Swiss chocolate bar was a rarity.

How To Live For Nothing

By exchanging dollars for Swiss francs and then reconverting the francs into dollars, it is possible to make an appreciable profit that can then be converted into Italian lira, thus enabling an individual to live for a short while in Italy for nothing.



Covered bridges resembling this one were seen all through Switzerland by the two travelers.

The Italian lira is bought for 600 to the dollar, while wages for the average worker are about 500 lira a day, also the price of a carton of American cigarettes.

In Italy again the black market was in evidence with many kinds of goods and products available as the Italians were successful in hiding much from the Germans. Identification cards must be carried at all times.

\$300,000,000 Spent for Reconstruction

American soldiers are regarded not as conquerors but as liberators by the Italians and the U. S. Army has recently spent \$300,000,000 rebuilding bridges, roads and airfields.

Despite considerable war destruction, Belgium with its coal resources has a decided air of prosperity. Inflation has passed its peak. Theatres and night clubs are crowded. Mr. Coogan observed two installations of fluorescent lighting in Ghent, Belgium, one in an ultra-modern windowless factory and the other in the ancient city hall built in 1480. While en route to Luxembourg, the Sylvania travelers stopped at Bastogne where General Lucius Clay had sent his famous "Nuts" message to General Van Runstedt and was later rescued by General Patton. Hamm, the large American cemetery where General Patton and

8,000 Americans are buried was also visited.

These Ardent Customs Officials

Mr. Coogan's train for Holland left Brussels, Belgium at 8:45 A.M. Just before the border, he had to leave the train to have his passport, money, railroad ticket and baggage checked by Belgian customs officials. Then he re-entered the train, moved for exactly 15 minutes and went through the same routine all over again at the hands of Dutch officials. The examinations consumed an hour and 15 minutes. Mr. Coogan arrived at the Hague at 1:40 P.M., stopping at the WitteBrug Hotel, the only one during the entire trip where radiators were really hot.

Soap Is Scarce

Women's clothing in Holland costs about four times as much as in the United States and a man's suit requires an entire year's ration points. Coal is scarce in Holland and central heating not permitted. Cooking gas is also short, no baking was permitted, and housewives are allowed to prepare but one hot meal a day. Installation of new gas and oil burners is also forbidden. Theatres, of course, were also unheated and so not very popular. Soap constituted another shortage which made crowded stores and other public places more than usually hard to bear.

The morale of the Dutch, however, is excellent in spite of hardships. The government of Queen Wilhelmina is stable and the populace looks forward soon to the birth of a fourth grandchild.

Talk of Uniting

Mr. Coogan heard considerable discussion regarding a projected economic union between Holland, Luxembourg and Belgium where the three countries maintain the same tariff and agree on duties to be imposed on all goods from each to the other two.

In Denmark Mr. Coogan found the Social Democrats strongly entrenched. Exports were large, with 60% going to England and a two-way trade with Russia established. Though the Germans stole 11 billion Kronen from Danish banks, Mr. Coogan was convinced that an excellent start had been made toward reconversion.

Great Demand for Radios

Before leaving Denmark for Oslo, Norway, Mr. Coogan's money was counted by customs officials. Clothing

in Norway was practically unavailable though food was plentiful. Nothing but wood was used for heating. Norway, too, suffered at the hands of the Germans, many towns being completely destroyed, both on the West Coast and in the North when the Russians crossed into the country. The Nazis confiscated all radios so naturally there was a great demand for them throughout the country.

In Sweden the cost of living is about the same as in New York though servants may be obtained at about one-third the wages required in this country. Owing to high taxes, Mr. Coogan was informed, people are unable to save much money. Visitors are being made aware of an effort to return to the comforts and customs of pre-war days and many of the hotels and restaurants are requiring guests to wear evening clothes. Traffic is noiseless as horn blowing is prohibited by law. Sweden's socialistic government has extended a credit of \$1,500,000,000 Kronen to Russia.

The flight from Stockholm to London, England, required just five hours. A London hotel room costs just \$11 a day and Scotch was available to those known at the hotel at \$15 a bottle. Cigars sell from 75¢ to \$3 each.



Mr. McClintock, left, and Mr. Coogan, snapped in Bern, Switzerland, near their hotel.

There Was Real Prosperity in Ireland

Mr. Coogan flew from London to Dublin, Ireland, arriving two hours later. While there are certain shortages, food is plentiful and agriculture is doing well. There was real prosperity in Ireland, Mr. Coogan reported, and electrical goods are being imported in fair volume from the United States. The Nationalistic Government is still strong with De Valera at the helm. Returning to the United States on the Queen Elizabeth, December 12, Mr. Coogan described his return trip as "Like a week's visit to the Waldorf."

ED MYERS WINS \$140 FOR HIS SUGGESTION



MEMBERS OF THE IPSWICH FIXTURE PLANT who in 1946 won \$25 or over for one award, L to R (seated): Thaddeus Suwinski, Martha Hudson, Mabel Bragdon, Eugene E. Poirier, Thomas J. Walsh (1 idea worth \$170), Wendell M. Bagley. Standing: Chet T. Oliver, Gustave Tramer, Alton Cookson, Henry Giovannacci, Frank E. McCarthy, Charles W. Sayward (received 5 awards). Marie Hall missed the picture taking.

Top money winner for the new year at this writing is Ed Myers of Sylvania's Salem Boston St. Lamp Plant—he earned \$140.82 for an improved method of shipping.

For the month of January and for the last portion of December, forty-one Sylvanians were \$847.82 the wealthier

for their ideas, improving production methods and working conditions in their plants.

Awards ranged from \$3 to \$140—an average of \$20.68 per suggestion. This above-average record is a good start for 1947. Keep it up!

SUGGESTION WINNERS

BAYSIDE. Harry Woods, IM, \$20.

BOSTON ELECTRONICS. Arthur J. Bourbeau, IE, \$60; Costy Leszynski, IM, \$10; Stanley Smith, IM, \$5; James Anderson, IM, \$5; SA, \$3; Joseph Sanchez, IM, \$3; IM, \$3; James Meehan, IE, \$3; Charles Dudevoir, GI, \$3; Donald Derflinger, SA, \$3.

EMPORIUM. Thomas Newton, IE, \$60, IC, \$3, I, \$3; John Lundquist, IE, \$25; Frank Sterley, IE, \$25; Helen T. Johnson, I, \$25; Russell Beckstrom, GI, \$10; Claude Brown, Walter Brown, IM, \$10; Rexford Waddington, I, \$8; William Whiting, I, \$7; Phydalis Hatt, IC, \$5; Theresa Young, IE, \$5; Frank Schager, IC, \$5; Sally Armstrong, SA, \$3.

IPSWICH. Thomas J. Walsh, GI, \$65, AA; Alton Cookson, 1E, \$50, IE \$20; Frank McCarthy, IE, \$30; Charles Sayward, IE, \$30, SA, \$3; Ernest Beau-

lieu, IM, \$25; Nick Polychronoplos, IM, \$15; William Lazaropoulos, IM, \$15; Napoleon Gagnon, IM, \$6; Ed Leach, IM, \$5; Henry Cowles, IE, \$5; Edmund Sheehan, SA, \$3; Wayne Eustace, SA, \$3.

MONTOURSVILLE. Allen R. Mertz, IE, \$50.

SALEM BOSTON ST. Edward Myers, IM, \$140.82; Howard Foss, IM, \$10.

TOWANDA. Raymond Thurston, IE, \$45; Francis Saxe, GH, \$10; William Bailey, IC, \$6; Albert Crandell, IE, \$5.

IE, Improved Equipment. IM, Improved Method; GI, General Improvement; I, Improvement; SA, Safety; GH, Good Housekeeping; IC, Improved Conditions; AA, Additional Award.

REINSTATED VETERANS

BOSTON ELECTRONICS. Army: John Bontorno, Roberta Gallagher. Navy: James Manzi, Francis George. Marines: Everett Wykes.

SALEM GENERAL ENGINEERING. Army: John Cleveland, Robert Roode, James Cassanos. Navy: Charles Murrish, Carl Durgin, Evelyn Stacey.

SALEM LAMP. Navy: William Breen.

TOWANDA. Navy: Donald Daly. Army: Joseph Bosworth.



ALLEN R. MERTZ (left) of Mechanical Maintenance Dept. at Montoursville Tube Plant receiving award of \$50 for redesigning and making new bending tool for stem benders. R. F. Harbeson, Secretary of Montoursville Suggestion Committee, is making the award.

How We Met . . .

Viola Johnson, The Beam's corresponding reporter in Ipswich, asked some of her fellow workers how they had met their husbands . . . or wives:

SYLVANIA PLAYS CUPID

"I owe it all to Sylvania! We met driving to and from work."—Pat Lockhard.

IN A LONDON FOG

"It was a foggy night in England; the blackout was in full effect . . . and I was trying to find my way back to my airport. I bumped into a girl who kindly showed me the way. And now we are married!"—Wendell Bagley.

POWER OF SUGGESTION

"I met an American serviceman at a friend's wedding. And now I am an English war bride."—Peggy Austin.

HEADLONG INTO LOVE

"I was sliding down a hill and bumped into a girl on another sled. That was in 1932. Six years later she crossed the continent to meet me in California where I was working for Lockheed Aircraft and married me there."—Al Illsley.

LOVE LETTERS

"A friend of mine asked me to write to a girl while I was in service. I wrote her for the first time in January 1943. That was the beginning of the end. We were married in August."—Joe Sweeney.

U. S. O.

"I met her at a U. S. O. dance in Detroit. I proposed to her while it was pouring rain and we were snug on a bandstand in Selfridge Field, Michigan. After I was discharged, we were married."—Don Perkins.

CHOIRS OF ANGELS

"My wife was singing in the church choir and I was taking the collection."—Irving Standley.

AND LIVED HAPPILY EVER AFTER

"I met the girl who was to be my wife at a funeral. Two years later, we were married, and believe it or not have been living for 33 happily married years after."—Arthur Gilman.

SHE CHARMED HER WAY INTO THE ACT

"We needed a girl for our animal act to be given in the toy department of a department store in Newark, N. J.

A young lady applied for the job and it was love at first sight. Thirty days later, we were married in the dressing room of the same department store five minutes before the show went on. Santa Claus and the clown were our witnesses. 'Of the 1,000 weddings at which I have officiated,' the minister said, 'this is the most romantic of them all.' The Tramers have been married for 18 years and have two daughters, Joan and Sharon. —Gustave Tramer.

UNDISCOURAGED

"I met my husband at a dance. I stepped all over his toes but he decided to marry me anyway."—Mrs. Benjamin Colas.

THANKS TO MY SISTER

"My sister, very popular with the boys, despaired of my ever getting a man. She refused to go out with a date of hers until he found a date for me. It worked!"—Mrs. Ruby Perkins.

I MARRIED MY BOSS

"I was working at a PX in Italy and he was the Staff Sergeant in charge."—Theresa Pikul (Italian war bride).

HEART TROUBLE

"I went to the hospital with appendicitis and came out with heart trouble. She was the night nurse."—Cleon Johnson.

WAS UP EARLY

"He came to visit with a fellow Army officer and they stayed overnight. They had to get up early in the morning to catch a 4:20 A.M. milk train. I gave them a breakfast of baked beans, brown bread and homemade apple pie. 'Any girl who would get up so early to send two hungry men to the train, would surely make a good wife,' my future husband said. Were he living today, we would have been married 40 years."—Mrs. Stephen Smith.

PERHAPS IT WAS THE RED BATHING SUIT

While vacationing at Manomet Beach back in 1938, a certain young lady spied Bob Franklin walking along the beach. In a prankish mood, she playfully tossed a dead fish at Bob as he passed. Perhaps it was the red bathing suit . . . perhaps . . . well, anyway, she is wearing a wedding ring now.—Bob Franklin.

The Sterley Service Record —55 Years with Sylvania



THE STERLEY'S: left to right, Edward, Mary, Jimmy and Joe. Frank missed the picture taking. By the way, four of the five are members of the S & R Plan. Jimmy has to complete his waiting period.

What would Sylvania's Emporium plant do without the Sterley family? There are five of them that work for Sylvania and between them their service record totals 55 years!

Mary and Frank are the old timers of the family. Mary, Engineering Assistant in Emporium's General Engineering Dept., has 24 years' service. Frank, who has been with Sylvania for 20 years, is Supervisor of Mechanical Development Assembly Section.

Ed and Jimmy, both in the service at one time, have returned to the Mechanical Design Dept. and Parts Dept., respectively. Joe, who served in the Army for 2½ years, is back on the job as machine operator.

Message to Ipswich

"Guys and gals" who are turning out Sylvania's famed lighting products needn't worry about their work going unappreciated. In the past few months, millions of eyes have taken in the Best Light in Sight in exhibits the country over.

Lighting products were displayed at the Food Industry Exposition in Atlantic City last month—(20,000 attended). Gasparilla's pirates and a million visitors overran Tampa's State Fair, Feb. 4-15, to view Sylvania's Infra-red and Handy 5-Pack products. At the same time, our lamps and fixtures were being shown at Ohio's Hardware Show and the National Electric Sign Association in Chicago.

Last December, four guests of the Columbia Broadcasting System were shown through Sylvania's N. Y. Lighting Center by Fred Parker of the Advertising Department. These four young ladies appeared on C. B. S.'s "Cinderella In-

corporated," broadcast twice weekly over station WCBS. Mr. Parker interviewed the girls during the broadcast. They talked about their visit to the Lighting Center.

And if you're in New York, you can drop in to The Museum of Science and Industry at Rockefeller Center to see Sylvania's exhibit of radio and lighting products there.

Danvers Roundup

So much has been going on up in Danvers, we thought we'd better round up all the news and put it into one column.

. . . with the hunting season over, Danvers reports but one deer to their credit—Ed Goudy's. But like the unsuccessful fisherman who fell in and at least caught a cold, it was reported, that Dick Ingraham has a case of buck fever . . .

. . . Danvers has its share of parties. One was given for Yolanda Marciano who is off to the Boston St. Plant to work for Norman Nickerson . . .

. . . the softball banquet was held on Dec. 7, a general get-together on the 20th, and a follow-up party on the 24th. The Sylvania Country Club is already making plans for a bigger and better Danverian summer. Tennis courts, weenie roasts, badminton courts and three softball diamonds are planned. Party lovers, take note . . .

. . . Karl Bayley, Vice President of the Employees Association, is busy planning a minstrel show for the early spring. Karl has a good deal of talent already lined up for the show—and probably a good deal of burnt cork.

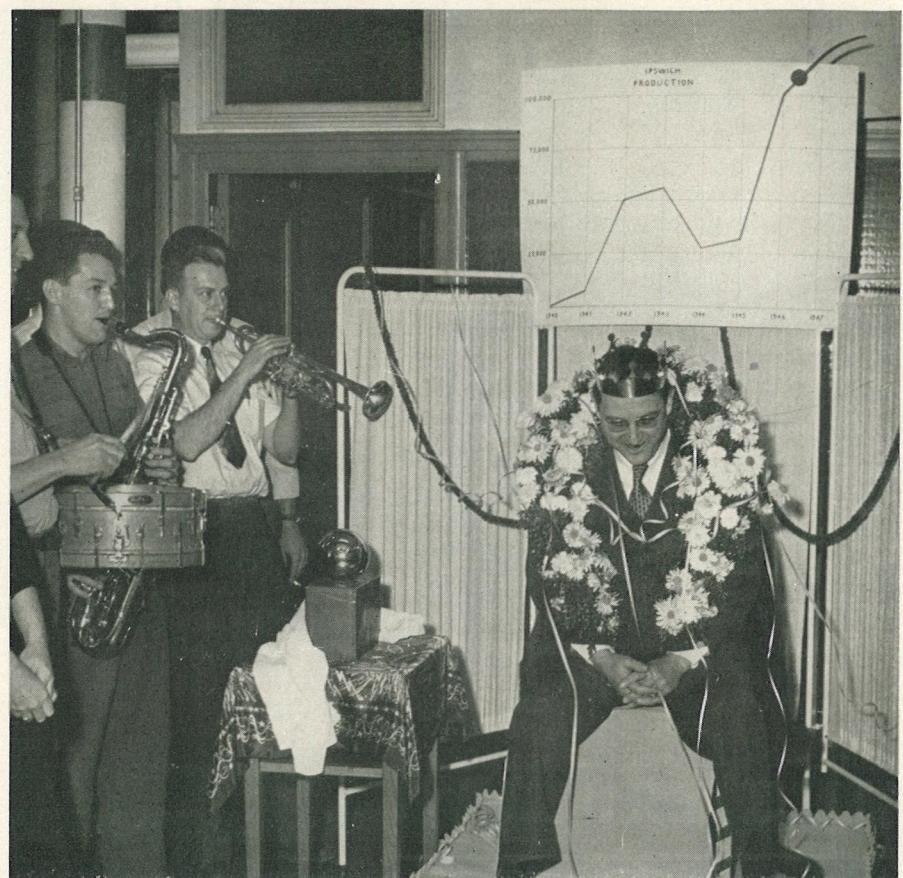
Happy About Her Predicament

Recent heavy snow and cold weather brought great joy to Miss Ingeborg Johansen of Sylvania's Ipswich Fixture Plant. For Miss Johansen is a native of Oslo, Norway. And snow and cold weather make for good skiing.

Miss Johansen, finding her car "snow-bound," unlimbered her native talent and came to work on skis.

Miss Johansen came to the United States 12 years ago, "just to see what America looked like. But now I love America and I don't want to go back to Norway. My parents are back there, and if it were not for the fact that I miss them, I would not change America for any country."

HAIL! KING CHARLES



CHARLES GODDARD, new General Manager at Ipswich, is honored in regal style. John Maher, snapped The King being serenaded by members of the band, Chester Stone, Douglas Farquhar and Irving Standley.

Word had reached the Ipswich Plant the day after Christmas that Charles H. Goddard was to be the new General Manager, succeeding Louis Kimball, new V. P. of Colonial Radio Corp.

Preparations were made to welcome the new chief. In the lobby, king-elect

Goddard was greeted by a band, floral wreaths, hails and cheers. Mr. Goddard was plunked into a makeshift chariot and pulled in a triumphal procession to the main office where, amid pomp and ceremony befitting a king, he was "crowned" by Victoria Mattera.

Personnel Supervisors in The Pennsylvania Area



met in Emporium last December to discuss problems for the new year. Front row, l. to r.: Richard Schumacher (Warren), Harold Crone-miller (Altoona), Janice McCreight (Brookville), Harold Harris (Towanda), Jane Sears (Secretary, Area Office), Wilson Hudson (Area Manager, Industrial Relations), James Lawler (Area Safety Engineer). Back row, l. to r.: Forrest Coe (Montoursville), Peter Boone (Emporium), Jim Parker & Gerry Morse (Long Island City), John Gilmore (Williamsport), Elwya Blanchard (Mill Hall).



Farewells

Employees of Williamsport gave a farewell party for Allen Keene, their Supervisor of Engineering, who was transferred to Kew Gardens, N. Y. Photograph above shows Al (standing) and l. to r.: Robert Homestead, Henry Wheeler, Duward Vergason and Dan Hurley. Mr. Keene received a gladstone bag and the pipe he is smoking.

A farewell party was given in honor of Samuel Smith and George O'Rourke last January in Sylvania's Forsyth Street, Boston, office. Mr. Smith is now the proud possessor of a golf bag and two sport shirts, and Mr. O'Rourke a beau-



tiful traveling bag (see photo above). Mr. Smith has been with Sylvania 18 years and had worked in the Salem General Office, Emporium and Boston Electronics Office. Mr. O'Rourke leaves us after 13 years. His last position was Purchasing Agent for Boston Electronics.

Orientation for Management

"Orientation" meetings for plant supervisory personnel to acquaint them with operations in other departments of the Company were inaugurated recently at Salem. Frank J. Healey, Vice President in Charge of the Lamp Division was host at the first three meetings held in the Hotel Hawthorne.

Principal speakers for the orientation series were Barton K. Wickstrum, General Sales Manager of the Lighting Division and Frank W. Mansfield, Director of Sales Research. James R. Duffy of the Public Relations Department was toastmaster.

President of Work Simplification

Robert F. Estella, Supervisor of Industrial Engineering of the Salem Lamp Plant, was elected President of the Work Simplification Society of Boston.

The Society promotes the application of Work Simplification techniques to all phases of management through the medium of guest speakers at monthly meetings, round table discussions and the reviewing of motion picture films of improved work methods.

25 Years a Sylvanian



Mrs. Thelma O'Leary, a technician at Lamp General Engineering, Salem, was inducted into Sylvania's Twenty-Five Year Club last December 22.

Above, Mr. Frank A. Poor, Director and Chairman of Sylvania's Finance Committee, is presenting Thelma with her watch. A party was given in

Li'l Chetty

From the lips of Al Capp, author of the comic strip, "Li'l Abner," comes the suggestion that Marion "Chet" Chetty of Sylvania's Industrial Engineering Staff, was the inspiration for the now famous character.

Chet, his tall, lanky frame and southern drawl, were in on the original bull sessions back in Boston in 1932 when Al first came up with his idea for Li'l Abner. The story goes:

Marion's brother, Bob, knew and worked with Al Kaplin (now Al Capp) on the Boston Herald in 1932. Al was "ghosting" comic strips at \$27.50 a week and Bob doing circulation work. It was during those years that Al was looking for a comic strip character of his own. Between Bob and Al, they came up with a hill-billy character they called Li'l Abner.

Al offered his newly created character to his old love, the Herald, but they turned it down. But it was not long before the Boston Globe bought it in 1933.

And now, Al still kids Li'l Chet about his striking resemblance to the tall, lanky, drawling Li'l Abner.

Thelma's honor by her fellow workers of the Production Development Section.

Mrs. O'Leary worked at the Boston Street Plant and is presently employed at the Lamp General Engineering Laboratories.

WEDDINGS

BROOKVILLE

Miss Evelyn Forrest, Mounting Dept., to Mr. Ernest Fetterman, Punxsutawney, on January 7.

Miss Cleone Ripple, Mounting Dept., to Mr. Bud McGregor, New Bethlehem, on January 2.

Miss Lucille Zimmerman, Filament Dept., to Mr. Paul Harriger on January 2.

DANVERS

Miss Mary Jane Burke, Photometric Dept., to Mr. John Bettencourt on December 14.

Miss Lucy Pantano, Finishing Dept., to Mr. Peter Gongas on December 1.

Miss Sophie Psaltas, Finishing Dept., to Mr. Charles Breton on December 5.

Miss Ruth Krankka, Finishing Dept., to Mr. Albert Mantylei on November 30.

Miss Helen Willett, Coating Dept., to Mr. Robert Thomas on December 7.

EMPORIUM

Miss Margaret Gulvas, secretary to Mr. Prime



Xmas is for Kids

A Xmas Party attracted some 250 children and parents.

Sa-So, the clown from Ringling Bros. circus, was second in popularity only to the cookies and ice cream served after the entertainment. The party was a final event to remember at Wakefield.

Picture (above left) was snapped by Earle Wickham.

Towanda employees threw a Xmas party for their children on December 21—91 kids and Santa were there. The tots (above right) had plenty to gurgle

over: nuts, oranges, candy and a gift for each.

The party at Danvers was nothing short of a full scale production! Mrs. Dorothy Rankins' Marionette Revue and Paul and Manuel Ignacio as Joe and Moe, the clowns, (left) had the children happily entranced—and Karl (Santa Claus) Bayley listened (with a Santa-like twinkle in his eyes) to urgent pleas for presents, far into the afternoon.

The question was: who had enjoyed themselves more, the kids or the grown-ups?

Anthony James Lenox, Chemical Production Dept., on November 30.

WILLIAMSPORT ELECTRONICS

Miss Helen Hummell, Assembly Dept., to Mr. Marc H. Miller on November 8.

Miss Thelma Bower, Personnel Dept., to Mr. Robert Nau on November 16.

Miss Lois Flock, Construction Dept., to Mr. Robert F. Newton, Jr., on November 16.

BIRTHS

BROOKVILLE

To Mr. and Mrs. Kenneth Carrier, a son, Thomas Gordon (6 lbs. 2 oz.), on December 29. Father is second shift Stem Dept. Supervisor.

DANVERS

To Mr. and Mrs. Dean Kimball, a son, David Longley, on December 30. Father is a supervisor in Mount Dept.

To Mr. and Mrs. Thomas Ruane, a son, on January 15. Father is connected with Production Control Dept.

To Mr. and Mrs. Henry F. Callahan, a daughter, Susan Jane, on November 24. Father is Manager of Danvers Plant.

To Mr. and Mrs. Jorma Savinen, a son, on November 22. Mother was formerly connected with the Factory Records Dept. Father is with the Equipment Development Division at Loring Avenue.

To Mr. and Mrs. Daniel McKinnon, a daughter, on November 24. Father is connected with the Mount Dept.

To Mr. and Mrs. James J. Ingoldsby, a son, on December 10. Father is Foreman of Relighting Dept.

IPSWICH FIXTURE

To Mr. and Mrs. James Kent, a daughter, Betty Ann, on December 14. Father is in Metal Shop.

To Mr. and Mrs. Reginald W. Tarr, a son (8 lbs. 1 oz.), on December 17. Father is an Industrial Engineer.

To Mr. and Mrs. Richard Courage, a son (8 lbs. 1 oz.), on January 8. Father works at Carton Fabrication Dept.

JOHNSTOWN

To Mr. and Mrs. Earl Mintmier, a son, Ronald Lee (7 lbs. 5 oz.), on December 23. Father is Supervisor in Mounting Dept.

SALEM GENERAL ENGINEERING

To Mr. and Mrs. Ivar Larsen, a daughter, Elizabeth, on January 6. Father works in Socket and Switch Dept.

TOWANDA

To Mr. and Mrs. Joseph E. Zenewicz, a son, Raymond Stanley (9 lbs. 4 oz.), on December 25. Father works in Engineering Dept.

To Mr. and Mrs. Walter P. Rouleau, a daughter, Carol Ann (6 lbs. 8 oz.), on December 3. Father is with Wire Drawing Dept.

To Mr. and Mrs. Robert W. Kinsley, a daughter, Vicki Raye (9 lbs. 3 oz.), on January 17. Father is with Wire Drawing Dept.

To Mr. and Mrs. Claude E. Allis, a son, David Loren, on December 22. Father is employed in Swaging Dept.

DEATHS

Francis E. Ambrey died December 30 at the Massachusetts General Hospital following a five weeks' illness. A native of Lawrence, Mass., Mr. Ambrey was employed as an industrial engineer at the Danvers Plant. Surviving him are his wife, Ruth; two daughters, Susan Lee and Cheryl Lynn; his parents, Mr. and Mrs. Ernest D. Ambrey; his sister, Joan Ambrey; and his three brothers, Thomas, John and James, all of Lawrence.

and Mr. Lawler, to Mr. George L. Sherback on November 16.
Miss Lena Maginell, Order Dept., to Mr. Lynn Kriner on December 7.
Miss Anna Mae Morehead, Units Dept., to Mr. Russel De Hart, Milton, on December 25.

HUNTINGTON

Miss Lucille Bierly, Loganton, Penna., to Mr. Lawrence Karchner, Grid Dept., on December 24.

IPSWICH FIXTURE

Miss Shirley E. McPhee, Supervisor of Payroll Dept., to Mr. Clarence W. Dupray, Maintenance, on January 25.

Miss Sophie Pappas, Production, to Mr. George "Bucky" Georgeopoulos, formerly of C.S.D., on January 12.

Miss Jennie Bouranis, Production, to Mr. Angelo Pappas on January 26.

Miss Rita E. Cullity, Product Engineering, to Mr. Jacob Burridge on January 26.

Miss Wanda Woleyko, Red Cross worker, formerly in Appliance Division, to Mr. Morley Lewis Piper on December 14 in Paris, France.

JOHNSTOWN

Miss Alice M. Hummel, Mounting Dept., to Mr. Clyde H. Miller, Carnegie Illinois Steel Company, on November 22.

MONTOURSVILLE

Miss June Lord, Stem Dept., to Mr. Norman Montgomery on December 21.

Miss Gladys Marks, Purchasing Dept., to Mr. Vernon R. Eichelberger on January 9.

SALEM GENERAL ENGINEERING

Miss Marian Nash, Purchasing Dept., to Robert Boyle, S1/c on December 18.

SALEM LAMP

Miss Rita Gagne, Special Stem Dept., to Mr. Philip Blanchette on November 30.

TOWANDA

Miss Margaret Ann McCracken to Mr. An-



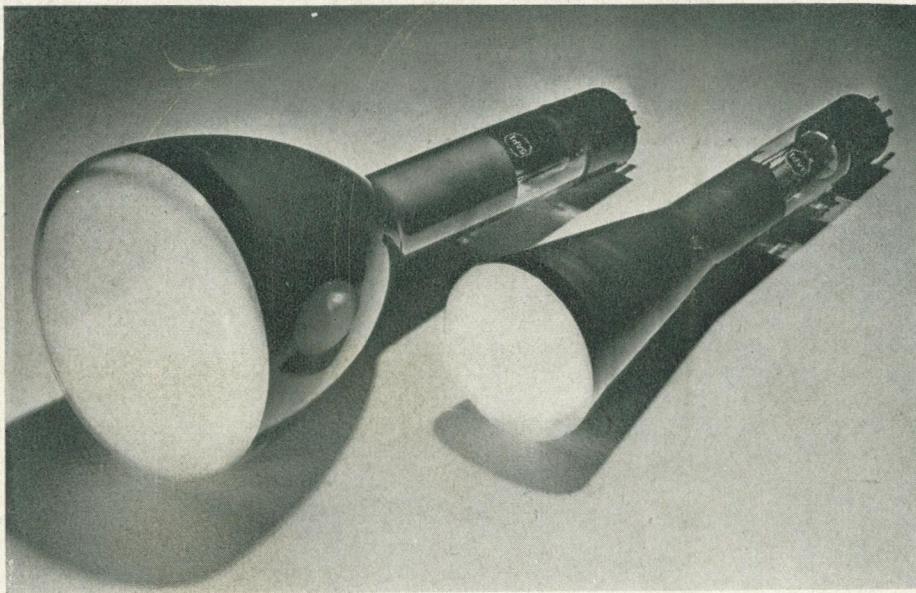
FORREST GEHRKE, of Sylvania's Kew Gardens Laboratories and, left to right, a T-1, T-2, T-3, a Lock-in tube and a typical tube of ten years ago.

THE SMALLEST RADIO TUBE IN THE WORLD!

Sylvania's T-1 and T-2 radio tubes, extreme left, make its wartime proximity fuze tube, third from left, look big. The tiny tube, constructed in the Advanced

Development Laboratories at Kew Gardens, is only $\frac{1}{8}$ " long and slightly more than $\frac{1}{8}$ " in diameter. It is shown in comparison with, right to left, the con-

ventional tube of ten years ago, current lock-in tube and the proximity fuze tube. Sylvania produced 140,000,000 T-3 tubes for the Army and Navy during the war.



TELEVISION'S HEARTBEAT

Here and on the cover are the type tubes Emporium's Cathode Ray Tube Plant turns out for this country's rapidly expanding television market. Each day, the FCC is granting licenses for more and more television transmission stations; receivers and transmitters are being manufactured in ever-increasing numbers. Extensive research is improving color transmission . . .

. . . this new industry's infant heartbeats reverberate across the Susquehanna River and up through the Pennsylvania hills. For it is there in Emporium that Sylvania Electric builds its cathode ray tubes . . . the heart of a television receiver!

The machinery used is complex. During the war years, it was used to manufacture the tubes essential to the Army and Navy radar equipment.

Sylvania's cathode ray tubes are the fruits of thousands of work-hours—of the continued efforts of hundreds of research engineers. Testing, retesting, eliminating, selecting, these men and all who aided them, make Sylvania's cathode ray tube a product of the highest quality.

Quality is necessary—the electron beam that streams down the tube to strike the screen and form the image, must pass across that screen 15,750 times a second!