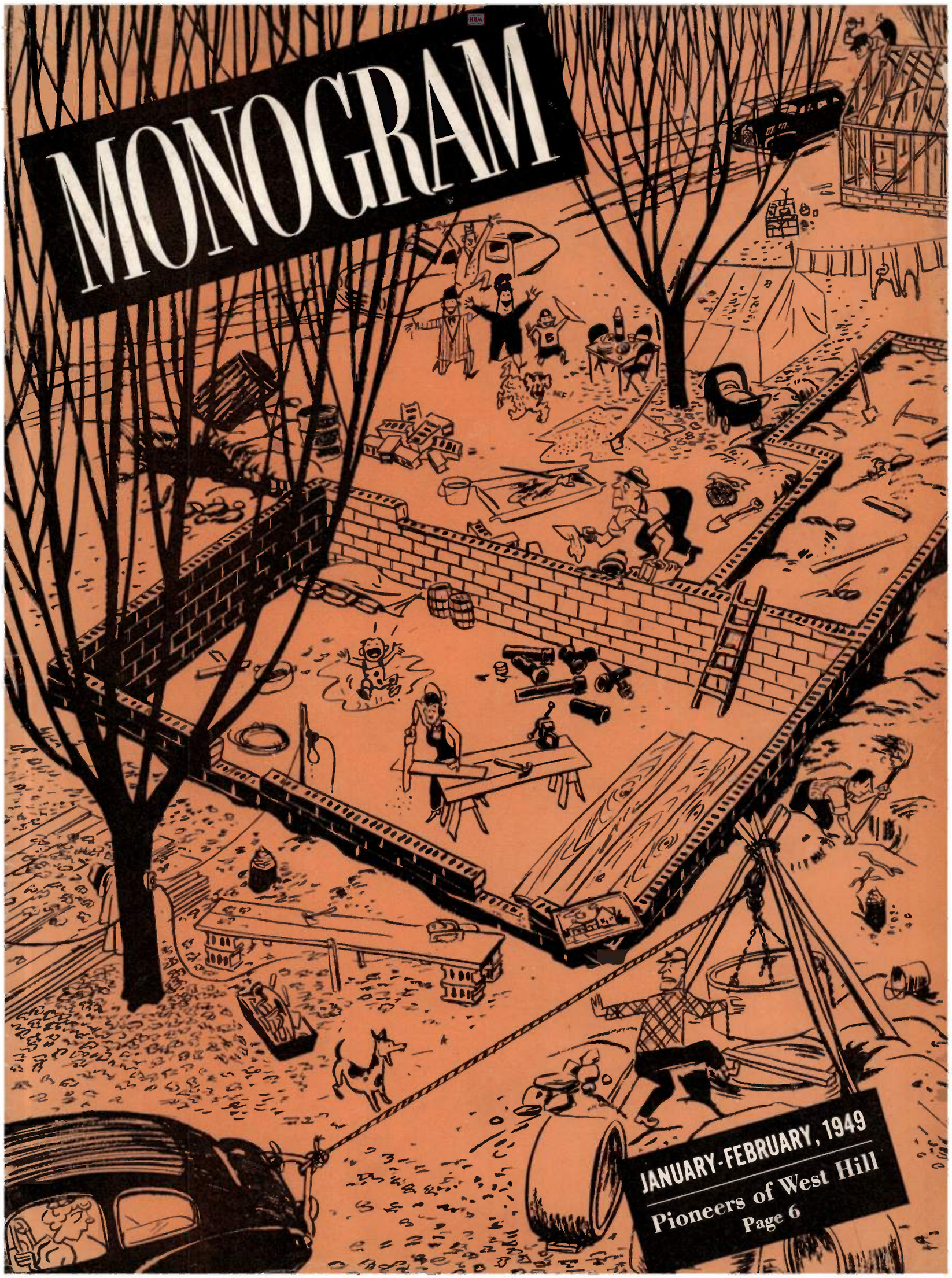
MONOGRAM



JANUARY-FEBRUARY, 1949

Pioneers of West Hill

Page 6

A NEW *Silent* SWITCH

NOW RATED 10 amperes for today's heavy loads

With its new 10 amperes, 125 volts, T-rating, this new mercury switch opens up new fields for silent switch applications, matches quiet operation to today's heavy loads. It's a long-life, specification-grade switch, made well to do its job well—*another General Electric first.*

And, when you're thinking of high-quality wiring, remember the extra confidence that comes with the General Electric name. It identifies a complete line of wiring devices which you always know you can trust. Ask your electrical contractor or dealer about this new General Electric mercury switch and the rest of the complete line. Section D26-1100, General Electric Company, Bridgeport 2, Connecticut.

GENERAL ELECTRIC

MONOGRAM

VOL. 26 **NO. 1**

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The General Electric MONOGRAM is an intracompany magazine published for all office employees of the Company and its affiliates. Circulation is restricted to General Electric personnel. It is distributed without charge to those on its circulation list. The object of the MONOGRAM is to circulate news of the Company and its people. It does not state policies, preferences, opinions, or recommendations for the Company. It is published bimonthly at Schenectady, New York, by the General Electric Company and printed in the U.S.A. by The Maqua Company. The MONOGRAM is copyrighted, and permission for reprinting articles therefrom should be obtained from the publisher. No outside material is purchased. Articles, news items, pictures, etc. may be sent direct to the editorial office.

NEW LOOK: Readers will find this issue of the MONOGRAM changed. And the difference is more than skin deep; the magazine has a new approach as well as a new look. We hope our readers like it.

We'd like to call particular attention to the feature on pages 14 and 15 entitled "Through Hoppy's Eyes." It represents an artist's concept of General Electric news items. It is the work—both text and illustrations—of DeWolfe Hotchkiss of Sherman, Connecticut, who is not, by the way, a G-E employee.

BLUE PAPER: "In a conversation a few days ago," writes a reader, "the question arose as to the origin of the particular shade of blue used for General Electric stationery. Might not the story behind this be of interest to MONOGRAM readers?" We think so, so we investigated. This is what we found:

Consensus of old-timers' opinions is that the color was adopted when the Company was formed in 1892 out of the merging of the Edison and Thomson-Houston companies. Both of those predecessor companies, it seems, used white stationery, and blue was adopted in order to distinguish it from the older papers. Every once in a while somebody suggests we change to white, but sentiment has always been against it; the feeling has been that the distinctive color has a definite recognition value to the Company.

SOIL FOR SNOW: Some 15 different types of finely divided soil, mostly from desert or arid regions of the country, have been found to be capable of producing snow in the laboratory, according to Vincent J. Schaefer of the Company's Research Laboratory in Schenectady. Although the different soils probably would not be as effective as dry-ice in producing snow in large-scale outdoor experiments, it is believed they do indicate a natural relationship of dust storms and volcanic activity with snow storms. When scattered to the winds by dust storms or active volcanos, these types of soil undoubtedly serve as nuclei for supercooled water in clouds to crystallize upon and form snow, Schaefer explains. Soil types tested came from such scattered regions as Mexico, Montana, Washington, Arizona, Nevada, Tennessee, and New York.

BURIED LIGHT: The Biblical reference to hiding one's light under a bushel is well known, but residents of Coeur d'Alene, Idaho are wondering who hid his light under several tons of earth. During excavation in an alley behind the Washington Water Power Co. building, ten electric light bulbs were found at a depth of about ten feet under the cement-surfaced alley. City records show the alley was paved about 1910, so the bulbs had been buried a minimum of 38 years. When tried in the power company's sockets, the lamps were found to be none the worse for their long burial. They are of the carbon-filament type produced by General Electric in 1905 for use in electric signs.

NO TOYS: A young man of at least 5 walked up to the General Electric display booth at the Texas State Fair during October, planted both feet firmly, looked the booth over, and said: "General Electric makes just about everything, doesn't it?" "Yes, son," replied the Lamp Department's V. J. Graham, who was in attendance; "I guess they do. They make locomotives, radios, refrigerators, and lamp bulbs." The visitor studied the display intently for a few moments. "I wish they made toys," he said, then turned on his heel and disappeared in the crowd.

a new workshop FOR science

On a hilltop outside Schenectady a handsome, impressively modern laboratory symbolizes the stature of General Electric research in today's world of science.

Photos by George Burns

THE great adventure of discovering the unknown is the everyday job of the research scientist. Driven by a deep curiosity he pursues his search for new knowledge. And, with the right tools in his hand, there is no limit to what he may accomplish.

General Electric scientists have proved this. The Research Laboratory has won world fame for its accomplishments. On its roster are the names of some of the greatest scientists of our time—names like Langmuir, Coolidge, Whitney.

Last fall the Laboratory started moving into the completed wing of its new home at The Knolls, an eighteen-million-dollar plant that recalls, by contrast, the humble beginnings of G-E research, when a staff of two carried out their experiments in a shed on the river flats. That was nearly 50 years ago, when there was no such thing as an industrial research laboratory anywhere. The idea was born one day when three men held a brief but highly important conversation in the office of E. W. Rice, G.E.'s technical director. With Rice were Albert G. Davis, head of the Patent Department, and Charles P. Steinmetz.

"The Company," said Davis with exasperation, "spends thousands of dollars and its best brains trying to add one half of one per cent to the effi-

ciency of the generator and transformer. Yet this current so carefully generated, transformed and transmitted is sent into a lamp with an efficiency of five per cent or less."

Rice had been worrying about the same thing ever since Edison's lamp patent had expired six years before.

Together the three hit on what seemed like the solution: a laboratory—a place where a man with inventive ability could experiment, could work away at an idea until he came up with something! And the work needn't be confined to lamps; research could be carried on in any field connected with the electrical business. The idea seemed to hold wonderful possibilities for strengthening the standing of the Company as the leader in electrical manufacturing.

The big problem was to find the right man for the job, a man of invention who could also organize and run a laboratory. Rice turned for advice to his old friend Elihu Thomson, then teaching at Massachusetts Institute of Technology. Thomson suggested a fellow professor, a bright young Ph.D. named Willis R. Whitney.

Whitney, however, didn't jump at the chance. Those were the days of Edison and Bell—days when an inventor starved in a garret while he toiled painfully to bring an idea to accomplishment. Scientists shunned the commercialism of industry.

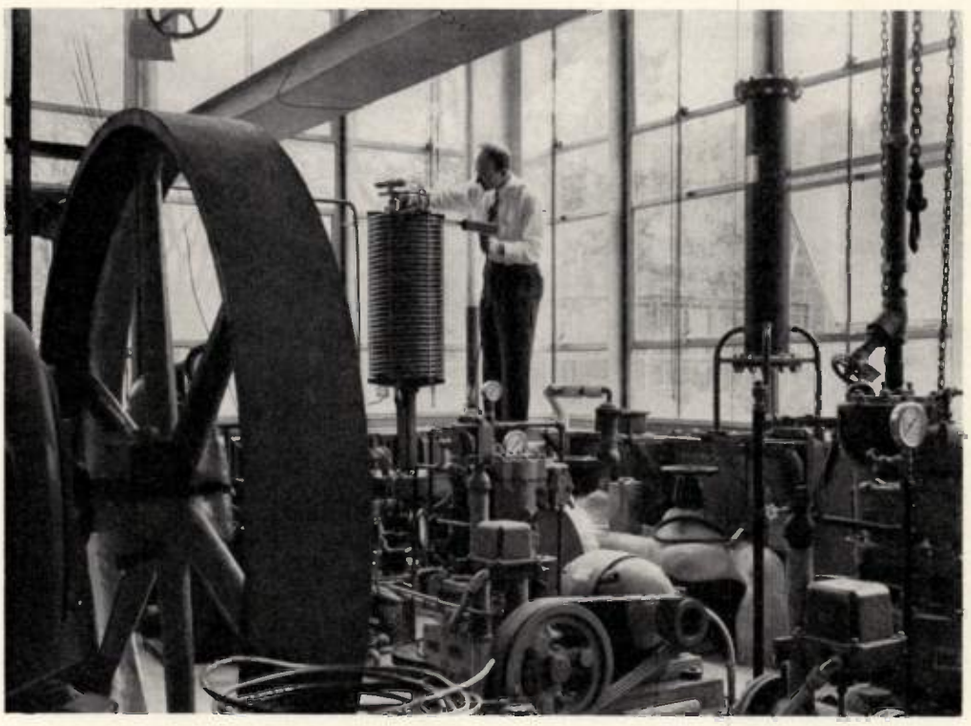
But one circumstance influenced Whitney: Steinmetz, that master mathematician and technical genius, was also in Schenectady working for G.E. So Whitney decided to give it a trial. Steinmetz welcomed the young scientist to General Electric, offered him room in his "laboratory" (a barn in the rear of his home on Liberty Street) and the services of his assistant, Tom Dempster.

Thus Whitney tackled the job of creating the first industrial research laboratory in the world. A gifted scientist and an inspiring and beloved leader, he was to direct the work of the Research Laboratory for the next 32 years.

Within a short time the Laboratory was justifying itself, not only to the Company and to Whitney but to the public as well. A better lamp bulb was on the market. And a young Lab assistant named Coolidge had accomplished something generally considered impossible: he had developed a technique for making tungsten, that extremely brittle material, so ductile it could be drawn into fine wires.

Soon after the founding of the Lab, Rice reported to the Company president: " . . . it has been deemed wise to establish a laboratory to be devoted exclusively to research. It is hoped by this means that many profitable fields may be discovered."

This laconic report has proved to be a classic in understatement. From those first pioneering years the Laboratory has been a constant source of new developments, new facts and ideas too numerous to list. From the untiring efforts of the researchers have come many things that today we take for granted as part of modern living. Their developments in artificial lighting have meant better lighted, pleasanter places to work and live in. Their vacuum tubes brought high-power broadcasting stations into being. The Calrod heating unit accounts for the efficiency of the electric range. Their silicone materials (rubber, Dri-film, oils, insulations) have given rise to a whole new industry. The Coolidge x-ray tube and the Inductotherm for producing artificial fever gave the medical profession powerful weapons against disease. And it can be truthfully said that the contributions of the Labora-



Dr. Milan Fiske studies how materials behave in temperatures close to absolute zero (−273° C). A separate building with special features to guard against explosion was constructed for this type of research.

Vice President C. G. Suits (left) and D. E. Chambers, executive engineer, are responsible for Laboratory operation. They are shown in Dr. Suits' office.

Dr. H. H. Race, right, supervised designs for the new Laboratory and planned many of its unique features. With him is H. M. Ottaway, construction overseer.

tory played a strategic part in the winning of two World Wars.

Although Whitney officially retired 16 years ago, he has continued to visit the Laboratory almost daily, working on experiments and keeping in touch with things.

Dr. William D. Coolidge, a Laboratory scientist since 1905, was its director from 1932 until his retirement in 1944. Dr. C. Guy Suits, the present director, was chosen to succeed him. He had been with the Lab since 1930. Under its three directors the Laboratory personnel has grown from two to over 800 people. And its dwelling places have kept pace with this growth. In 1912 it acquired a seven-story brick building especially constructed for the purpose and equipped with what was then the best in laboratory facilities. Another six-story building was joined to it ten years later.

The new Laboratory is like a scientist's dream come true. It is located at The Knolls,* once a private estate of 219 acres about five miles from General Electric's main plant in Schenectady. The building stands on a rocky cliff from which the view stretches across the winding Mohawk River, across the city, across trees and meadowlands to the distant mountains.

**The spot is familiar to older Lab members. It was there, in 1917, that an experimental station was set up and Dr. Coolidge discovered the principle of the only successful submarine detector used in World War I.*

But things other than beauty made The Knolls desirable. The Mohawk River at its back door forms part of the New York State Barge Canal, and a branch of the New York Central runs along the bank; thus there is ample water and rail transportation. The high elevation and rocky cliff formation are advantageous in certain work such as radar and x-ray experiments.

Building a big laboratory from scratch isn't just a case of picking out a piece of land and handing the rest over to architects and contractors. The requirements are specialized and no one knows better than the scientists themselves

what they need. Someone had to find out what these needs were, study them from a practical standpoint, and then work them out with architects and contractors.

Obviously the job called for a person with plenty of energy and patience, and with a flair for imaginative engineering. Dr. H. H. Race was elected. So, early in 1945, Dr. Suits surprised him with the question, "How would you like to help build a new Lab?" Race finished up his war projects and turned all his attention to the business of helping to plan a new home for his fellow workers.

"One thing we know," says Dr. Race, "is that we do not know what we will be doing ten years from now."

Since then he has been the general co-ordinator, the liaison between the Laboratory, the G-E Realty Corp. and the contractors and architects. He gathered ideas from the people in the Lab, he visited the laboratories of other big companies in the East, and he consulted Nela Park about lighting and the Trumbull Co. about the special electrical services that would be needed. Out of all this came the final designs for the new Laboratory.

The plans were influenced by the philosophy that has always marked the Research Laboratory—that of mutual co-operation. Because free interchange of ideas among the scientists is a good thing, it was decided to house them in one large building rather than in a group of smaller ones.† The north wing, yet to be built, will be as large as the wing already finished and will house the reception room, auditorium,

†For certain types of pilot plant operations the main building would not be suitable. Therefore there are small buildings nearby designed for a particular type of work. These include a synchrotron laboratory, a low-temperature laboratory, a chemical pilot plant, and a fluid flow laboratory. As yet only the low-temperature lab is completed.

Ray Falconer inspects the aerovane, an instrument used in the Laboratory's famous weather research.

A painting of Dr. W. R. Whitney, father of G-E research, hangs in the foyer. It was unveiled on his 80th birthday last August. Dr. Whitney founded the Lab in 1900.

general offices, library, conference rooms and cafeteria.

One important requirement of a laboratory is flexibility. Projects are constantly changing, and as they do, space requirements and experimental equipment change also. Therefore, much consideration was given to flexibility. Partitions between rooms can be moved easily in three-foot steps, making the rooms larger or smaller as required.

The latest in laboratory facilities allows almost any conceivable type of experimental work to be carried on. In each work room are sinks which look very much like the kind seen in an up-to-date kitchen. But instead of two faucets there are seven. And just as easily as the housewife turns on hot or cold water, the scientist can turn on hydrogen, nitrogen, oxygen and city gas—as well as hot, cold and distilled water. He also has at his fingertips compressed air, rough vacuum, 125-pound steam, and electricity of various voltages.

When the Research Laboratory was founded the Company's business was almost purely electrical. The fact that today General Electric is one of the most diversified manufacturers in the world is, in a large measure, the result of the fundamental research done in its Laboratory. And the situation happily works both ways. The efforts of the G-E scientist are unconfined. He may concern himself with anything from kitchen gadgets to snow or rain or atomic power.

Hydrogen, nitrogen, and other kinds of gases and liquids are on tap for each scientist, with service valves just outside his room. Dr. Harper North is regulating an air pressure valve.

In the big machine shop in the basement, skilled craftsmen turn out the infinite variety of special tools and apparatus that the scientists need to carry out their experiments—things that can't be bought on the market. The Laboratory also has a large glass-blowing shop.

Pioneers of West Hill

The spirit that built up the old Peyton Farm years ago has come to life again with a group of young General Electric families who are showing the world how to lick the housing shortage

COUNTLESS dream houses have been built on the slopes of West Hill. For years young couples have spent summer evenings and Sunday afternoons looking out across the rolling meadows to the hills bordering the Schoharie valley, wondering just where they would locate their houses to take in all of the view. The beauty of the spot, its convenience to the city and work just four miles away, the possibility of low taxes—all of the arguments for buildings there have been marshalled by thousands of eager-eyed couples. But against them has always been the great amount of hard, physical labor required to build a home on this heavily wooded, rocky site.

In the winter of 1945–46, however, a group of young General Electric engineers, employed at the Schenectady Works, finally became fed up with living in small apartments, with reading "For Sale" ads describing houses too expensive or too unlike the houses they dreamed of owning. All of them had certain technical skills, and the problem of building their own homes did not look to be too formidable a task. To them West Hill on the old Peyton Farm presented an ideal location. Their enthusiasm won over 216 people to buy shares in a housing association.

With the money paid in for shares the officers of the association purchased the 271 acres that comprised the Peyton Farm, but there were many problems to be solved before building could actually get under way. A community and lot layout had to be made. They had to make soil tests. Arrangements had to be completed for rough-grading the roads. If several hundred houses were going to be built eventually, an

Jack Sheets and Norm Barnes, members of the Planning Committee, point out features of their building plans to Will Cockrell and Lowell Holmes.

The neighbors help Gene Wright set the I-beams for his main floor while Gene checks blueprints and supervises the job.

Norm Barnes, whose ingenuity has solved many problems, seals his cellar wall. He still has to tar-coal the plaster.

Jinx and Bob Mayer spend Election Day mixing and pouring concrete in their attempt to get the foundation of their house finished before winter.

Final checks on their heating system are made by Bill Brown and his wife before the last concrete is poured. Their son Jimmy is trying to help too.

Jack Sheets uses his future living room for a workshop. Fred Dyer, who dropped in with some questions, has been pressed into service and helps to cut pieces for partitions.

adequate water supply had to be found that would supply not only this year's builders but also the future builders' needs and the demands of the stores and public services. Would utility lines run down the streets or at the back of the lots? And so it was the summer of '48 before building finally began.

By that time many of the early stockholders had moved away or lost heart. Many talked of building another year, of waiting for a while. They wanted to see the other fellow start first. The officers of the association believed that a start had to be made, and that once made, other builders would take heart. Many could still revise plans and look ahead to the days when they would build their own homes, but 17 young engineers decided to go ahead at once.

Norm Barnes spent his week ends in February tramping the slopes on snowshoes while he ran his survey. Spring saw many others out clearing away trees and brush and staking out their houses. If the men were going to do their own work, then they were going to need light, for this would be largely an after-working-hours job. So they bought a war-surplus electric power plant and ran power lines to all of the lots on which building was to start. Outlets were screwed to trees so that power saws could be brought out to help in the job of cutting lumber for forms and framework—and so that wives could use electricity to get supper and keep coffee ready during the long evenings of work.

Water Supply

Another big community project was providing a water supply. When the well was finally driven and a storage tank set up, it was discovered that the power system would either operate the pumps for the well or light their work, but it would not do both. An ingenious system of pumps was set up by the group under the direction of Kirk Snell, whose house was nearest the well. As water commissioner, he took over the job of seeing that the pumps worked and that the water lines were kept in operation.

With their community projects under control, everyone could get to work on his own house. From then on there were no holidays and no regular working hours. After eight hours in the Research Lab, the Art studio, or one of the shops, came many more hours spent doing manual labor. John Watrous, after all day at his drawing board, spent his evenings laying cinder blocks

or plastering and sealing his foundation. Research men became proficient at nailing on siding, putting in insulation, installing heating systems.

At times the work went ahead rapidly, but at other times there were disheartening setbacks. Jack Sheets, president of the group, spent many hours of back-breaking work digging down through clay and rock to sink his septic tank. At last the tank was completed, but then came a hard rain, the water did not run off fast enough, and his septic tank floated out of position. Rigging up a block and tackle, pulling out the tank, redigging the hole, and setting the tank down again was discouraging; for meanwhile work on his house stopped.

But there were good days too. The prefabricated panels of Jack's house went together in two and one-half hours, and then his friends and neighbors pitched in to put up the rafters and sheet in the gables and roof in one big week end. Shingling went ahead in a hurry with wife Teddy nailing too.

Family Projects

All of the houses are being built by families, not just by dads. Wives not only get the meals and tend the children, but they also pitch in on the actual work. Late evening finds one man putting in the cable for his lighting system, another putting down the copper tubing for heating his basement floor. At another house Mom climbs over the dirt piles to find the right wire to tie on the rope so that her husband can hook up the neighbor's floodlights to his already working lighting system.

True, there are discouraging days when materials do not arrive and the job has to stand still; when there is another break in the water line and the pumps have to be shut down while repairs are made; when somebody pounds a finger or strains his back, and "old Doc" Barnes has to stop work on his house and man the Red Cross station. But all problems are solved by the combination of ingenuity and hard work.

An architectural committee of members passes on all plans. At first engineering know-how is devoted to each set of plans to make sure that the house to be built is planned for the exact location. Then come the combined efforts of the committee to see that everything will be structurally sound, that drive-

The Water Commissioner, Kirk Snell, is building next door to the pumping station. He supervised the installation of the pumps, but now he has to keep them running.

There is still a long way to go before drapery materials will be used, but the wives cannot resist knocking off work with pick and shovel to admire Mrs. Sheets' new purchase and perhaps do a little daydreaming about the future.

ways will be built so that maintenance in winter weather will not present too big a problem, that when doors swing back they will not push someone down a cellarway. Ingenuity is also being used to provide the maximum use of the location. If a house traditional in design will not provide a view from the living room and a southern exposure for the kitchen too, then design is sacrificed, and the outside walls are set at an angle that will provide both.

Time will not permit all of the present builders to get their houses under roof this winter, but many of the owners are roofing over the first floor so that work can go ahead on the basement level. In some cases the lower floor will provide a residence during the months when outside work has to stop.

It will be a long time before the envisioned community will be complete. The community marketing area, the new school, the church, the picnic parks, and the ski slopes are all in the future, but all of those things are nearer realization because of the pioneering work of the '48 builders. Their hard work and enthusiasm will pay off by proving to the '49ers that it can be done.

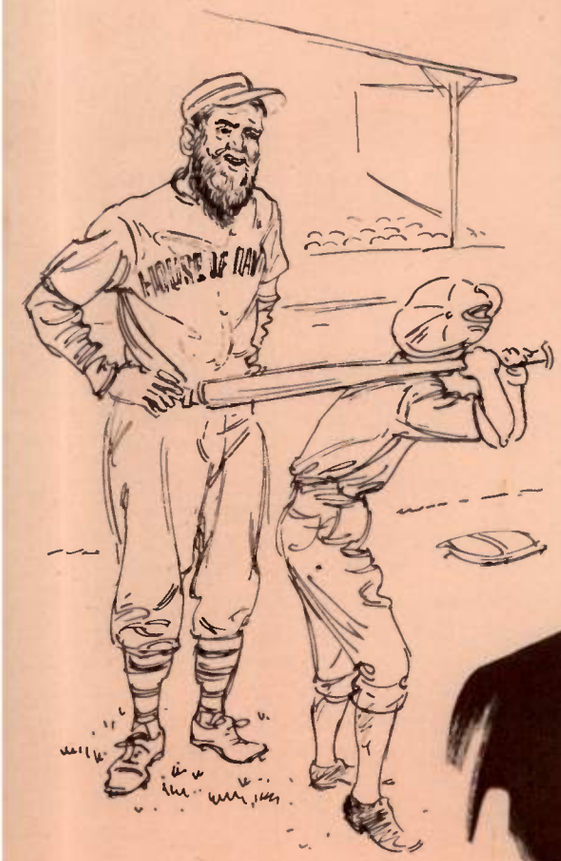
Three-year-old Ronnie is a big help to his father with the family shingling job. Mrs. Sheets and her daughter Jackie, at the foot of the ladder, are wondering whether their help is needed, too.

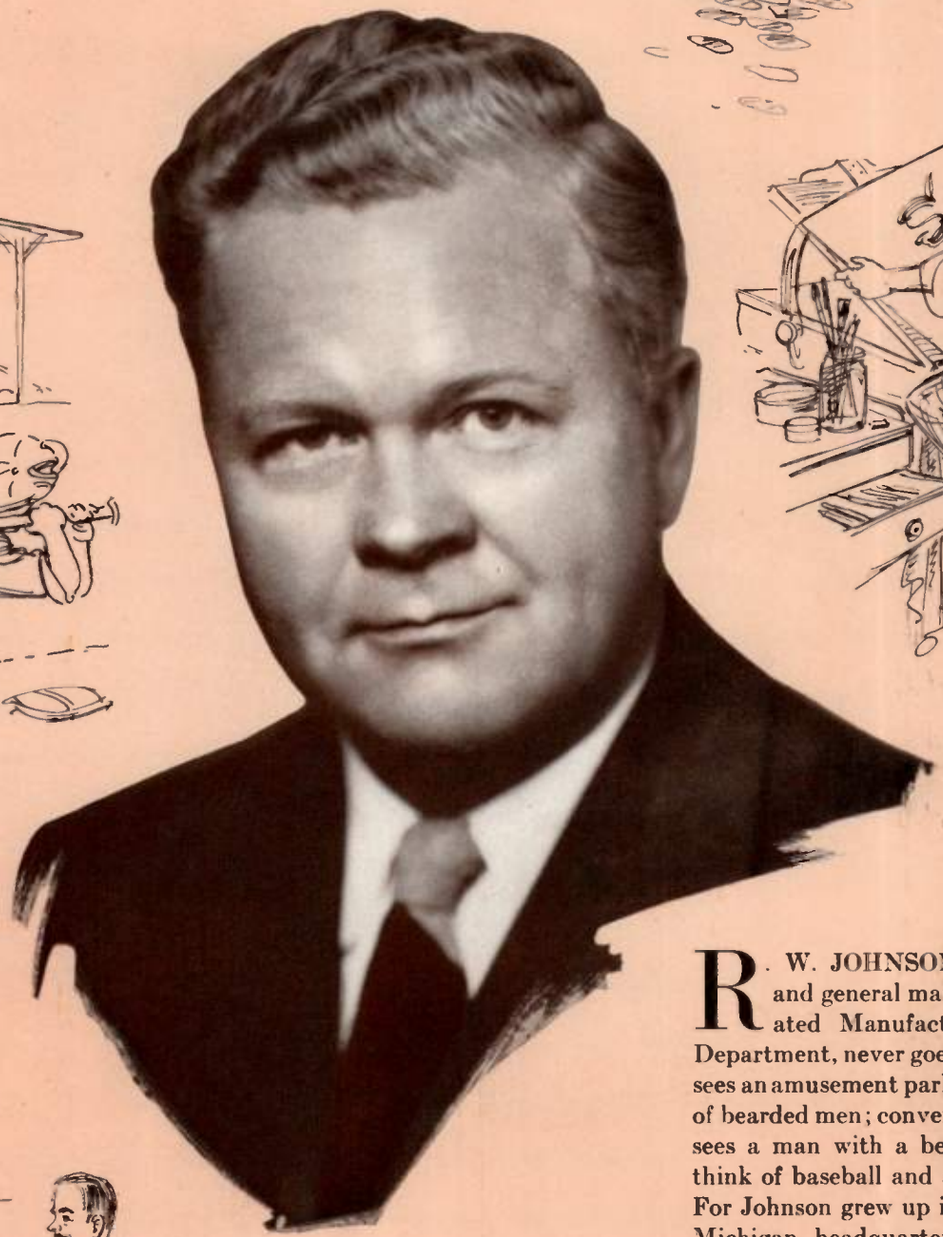
The site of the West Hill building project shows that there's still a great amount of work to be done, but the young engineers who are building their homes know that ingenuity and hard work will eventually lick all problems.

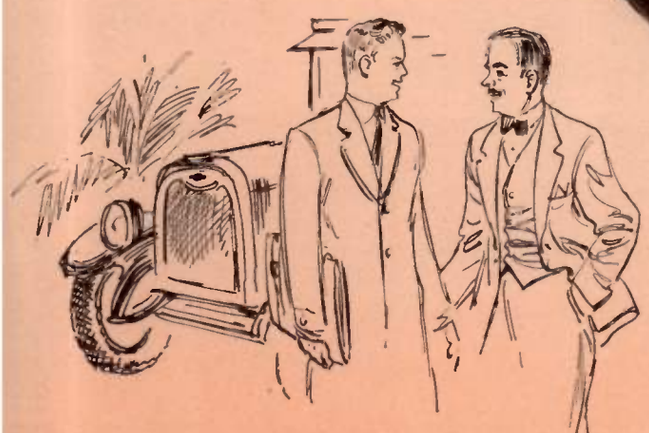
OFFICIALS OF THE GENERAL ELECTRIC COMPANY

R.W. Johnson

LIAISON WITH AFFILIATES







R. W. JOHNSON, vice president and general manager of the Affiliated Manufacturing Companies Department, never goes to a ball game or sees an amusement park without thinking of bearded men; conversely, whenever he sees a man with a beard he's likely to think of baseball and amusement parks. For Johnson grew up in Benton Harbor, Michigan, headquarters of the House of David, and a considerable part of his boyhood time was spent in the amusement park and at the baseball games conducted by the bearded members of that cult.

Johnson is not, however, a native of Michigan but of Michigan City—

Indiana. By nationality he is a Swede, for all four of his grandparents were born in Sweden. But they didn't stay there; Johnson's parents were both born in Indiana. His mother was brought up on a farm near LaPorte, and his father was an express agent in Michigan City. Roy William Johnson was born September 5, 1905, the older of two brothers.

The family moved to Benton Harbor when Roy was three. The House of David amusement park was situated not far from the Johnson home. It was a very elaborate affair and naturally a great attraction to the children of the neighborhood. It became a very important part of Roy's boyhood life.

Working for a Bicycle

But there were plenty of other things which interested the youngster. One of them was a bicycle. He didn't own one, so he started peddling papers when he was nine in order to earn the purchase price. After what seemed to him then an interminable length of time, he accumulated enough money and bought the bicycle.

By this time he found he could make more money delivering meat, so he gave up his paper route and took an after-school job in a butcher store. When the family moved to LaPorte in 1917, where he went through high school, he moved up another rung in the business ladder: he got a job as delivery boy for the Boston Store, which was LaPorte's leading department store. His association with that business laid the foundations for his future career.

For young Roy had talent; he could paint signs. The advertising manager of the store recognized the youngster's ability and started making a display boy out of him. He became a pretty speedy sign painter. During his high school years he got into other phases of the work of his department—trimming windows, arranging store displays, etc.

It didn't leave him any time for high-school athletics. But he was able to take part in debating and oratorical activities, for he could do that at night. He liked it so well that he made up his mind to be a lawyer. Several local lawyers took an interest in him because of his debating ability; they encouraged him to go to law school.

The lawyers were University of Michigan men, so it was only natural that young Johnson became interested in that school. He knew he'd have to work his way through, and he knew that, much though he liked his department store job, it didn't pay him enough to get him through college. In the summer of 1923, after he finished high school, he got a job with a contractor on a drainage and tunneling project. Even this paid him only 50 cents an hour, so he persuaded the boss to make him an assistant tunneler. This brought his pay up to $1.25 an hour, and he finished the summer with about $400—enough to get him into college.

He quit the tunneling job just in time. The tunnel was then under a golf course, and a 200,000-gallon water hazard lay immediately overhead. It was a hazard in more ways than one, for the water had started to leak into the tunnel, and the danger preyed on the youngster's mind, even influencing his dreams. He would wake himself up at night by screaming: "Run for your lives, she's coming!" His family couldn't understand his mental state; his father and mother thought he had a safe job above ground. He hadn't told them he was a tunneler.

Four days after he gave up the job, the entire 200,000 gallons of water came through into the tunnel. One man was killed and another was hospitalized for months.

Johnson's four years at the University of Michigan were pretty strictly busi-

ness-like. His first job was waiting on table. After a month or so of that he joined a group of fellows who peddled hot food to fraternity houses at night. They used big carts with large wheels, designed for easy pushing, but even so the hills of Ann Arbor took the starch out of him. One winter of that was enough; the following spring he got an appointment with the owner of Ann Arbor's leading department store (Mack & Company) and applied for a job as a sign painter.

He was hired at 75 cents an hour. He reported to the manager of the display department, who told him he could arrange his working hours to suit his convenience as long as he turned out the work. He worked afternoons, Saturdays, and some Sundays. He punched a time clock and was paid on his clock record. He made from $20 to $25 a week.

Although he was still a college undergraduate, he found himself becoming a success in the department store. In his junior year he became advertising manager—he had three people working for him. He went in to work afternoons and Saturdays, when he did the planning, layout work, type specifying, etc. In his senior year he took on merchandising in addition to his other functions. Although he was still being paid on an hourly basis, he worked fewer hours and made just as much money as he had before. Not only did he earn the money for his education—he finished college with $400 clear.

Codes of Justinian

Of course he had no time for any extra-curricular activities; his work and his studies kept him pretty busy. He was very serious about his pre-law work, and his first two years were concentrated entirely on that. He realizes now that he bit off a little more than he could chew by electing to start with the Codes of Justinian in the original Latin*, and when, in his sophomore year, he discovered that *jus* had eight different meanings, he decided to give law up as a bad job and take up merchandising as a career, instead.

So he immediately shifted his emphasis to business and economics. The University of Michigan had no business school at that time, but Johnson was able to pick out the courses he needed, just the same. In spite of the change of horses in midstream, he was not only able to finish in four years but he was graduated in the top quarter of his class.

In his final year, when it came time to decide where he was going to work after graduation, Johnson at first thought he'd like to try the electrical business. He was interviewed by representatives of both General Electric and Westinghouse, but neither interview resulted in a job.

So he tried his next choice: the automotive industry. Easiest way into that field with his background was through advertising; he got exactly what he wanted with the Campbell-Ewald Company of Detroit, an advertising agency

* Principally of historic value only.

which handled all the advertising for General Motors. He was assigned to a field service unit which had been organized to work with zone managers of Chevrolet and Buick to co-ordinate local with national advertising. It took him to 36 of the 48 states. He had wanted to learn something about the automotive business and he had wanted to see the country, and he got both wishes.

Meanwhile he got married. He married Ellen Lehtinen, a Peterboro, New

Hampshire girl in the class behind him at Michigan. They met in Des Moines for the ceremony and went on from there to the West Coast. It was part of Johnson's General Motors field trip, but it came in pretty handy as a wedding trip.

By the fall of 1929 the young couple began to get fed up with traveling and living out of a suitcase. They wanted to settle down somewhere. So Johnson accepted an offer from his old employer, the Mack & Company store in Ann Arbor, becoming general merchandising manager. The business school had now been organized at the University of Michigan, and he planned to enter in the January term and work for a business degree. But he never started his postgraduate studies; his plans at the department store hit a snag. It was only a matter of months before he realized he was not going to be happy there.

General Electric Start

Vice President R. S. Peare was then general manager of The Maqua Company, General Electric's printing and engraving company in Schenectady. He had heard of Johnson from C. H. Lang, and he seemed like the kind of man he could use in his business. So an interview was arranged on the occasion of Peare's next visit to Ann Arbor. The outcome of that interview was Johnson's resignation from Mack & Co. to go to work for General Electric. Peare took him down to Bridgeport to take charge, in April, 1930, of a newly established branch office of The Maqua Company in the General Electric plant there.

But Johnson didn't stay with Maqua long. His intimate association with the advertising activities of the Appliance & Merchandise Dept. brought an offer, in December, 1930, of a job in that work, and he accepted with alacrity. In 1935 he became assistant to the manager of the home laundry equipment division. Two years later he was given a two-hat job: advertising manager of household appliance sales and manager of the Miscellaneous Products Division. As wearer of the miscellaneous products hat he pioneered in the development and first promotion of the Company's electric blanket. In this capacity also he became interested in the electric razor, which led to his leaving G.E. in 1939 to take a job with Schick.

After a year or so with Schick, Johnson did something he had wanted to do for some time: he teamed up with a Hartford man to organize Post & Johnson, Inc., an advertising agency. Then, in the middle of 1942, he took on a three-day-a-week OPA assignment to work on the problem of the rubber shortage. After a tour of the country to survey the situation in the field, he presented an elaborate plan to Leon Henderson, who

presented it to President Roosevelt. The result: the wartime gas rationing and tire inspection system.

Then he went back to work with Schick again. But he hadn't been there long when R. J. Cordiner joined President Charles E. Wilson of General Electric, then vice chairman of WPB, and asked Johnson to become administrative assistant to the vice chairman. He took the job late in 1942. The following year he was made director of the facilities bureau, with supervision of some 1500 employees.

When it became apparent, in 1944, that the war was being won, Johnson decided it was time to return to private employment. In May of that year he went to work with Telechron, Inc., General Electric's clock-making affiliate, becoming vice president in charge of commercial activities. In 1947 he returned to the parent Company as marketing manager of the Affiliated Manufacturing Companies Department. He was made manager of that department in March, 1948, and was elected vice president last September.

Present Responsibilities

Johnson is responsible for the Company's relations with Carboloy Company, Inc.; General Electric X-Ray Corp.; Hotpoint, Inc.; Locke Insulator Corp.; The Monowatt Electric Corp.; Telechron, Inc.; and The Trumbull Electric Manufacturing Co. These seven affiliates employ about 20,000 persons. Although each is a separate corporation, they are wholly owned by General Electric and operate just like any other department of the Company.

The rapid postwar growth of these affiliates recently made it necessary to adopt a more streamlined organization, and Johnson has been intimately associated with this operation. The organization pattern involves five key officers reporting to the president of each affiliate: a treasurer and four vice presidents responsible for manufacturing, engineering, marketing, and employee and community relations. In the process of reorganization hundreds of management jobs were created, which threw Johnson into a tough personnel problem.

Marketing Program

Next to personnel, Johnson's big interest these days is in marketing. A marketing training program, instituted in 1947, takes men from various business schools such as Harvard, Columbia, Wharton, etc., and places them on rotating assignments with the affiliates. The men work in teams of two, spending 60 days in each company. Following "graduation" they go into permanent jobs, and a new group takes over.

Johnson is very enthusiastic about marketing as a phase of business operation. "In the old days," he says, "a sales manager was handed a line to sell, and he had little or nothing to say about what it was or how many would be made. The modern marketing manager is not only responsible for sales but also for

product planning and production scheduling; he has a lot to say about what will be made when."

Johnson is so wrapped up in his job that he has little time for anything else. He admits to no hobbies except painting, and he has done little of that in recent years. He even gave up golf about ten years ago. He dislikes cards intensely. Although he enjoys music and the theater, he plays no instrument and has been to but one opera in his life.

The Johnsons have one daughter, a little over two years old. They live a very quiet life in their home on Wire Mill Road, Stamford, Connecticut.

Super-Flash

A new flash unit enables the camera to catch the details of such fast action as the breaking of an egg in a trap. At upper left W. R. Plant, lab engineer, demonstrates the equipment.

New photographic equipment reveals the secrets of high-speed action

SMASHING an egg in a rattrap as shown in the picture above isn't just a lot of darn foolishness—not when it's demonstrating a new photographic flash unit that catches the image of objects moving faster than sound. It was developed by engineers of the General Engineering & Consulting Laboratory and is believed to give light of a higher intensity than any previous high-speed light source. The flash of light lasts only two-millionths of a second but it throws enough light on a fast-moving object to take photographs showing virtually no motion at all. For example, a three-inch naval shell zipping past at 1842 miles an hour was stopped dead in its tracks and the camera caught even its shadow.

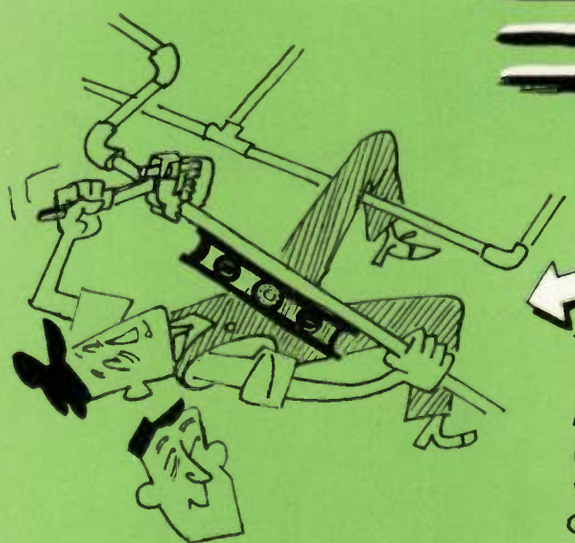
The light source equipment consists of two boxes slightly larger than shoe boxes; one holds the light source, the other the controls. The control signal may be an electric eye, a push button, or a sound.

The camera with its shutter open is placed with the light source in a dark room where the action is to take place. The lamp is set in the focus of a parabolic reflector, which directs the light (created by an electrical discharge through ionized argon) in parallel beams.

The equipment will enable engineers to study the properties and behavior of objects moving at great speeds.

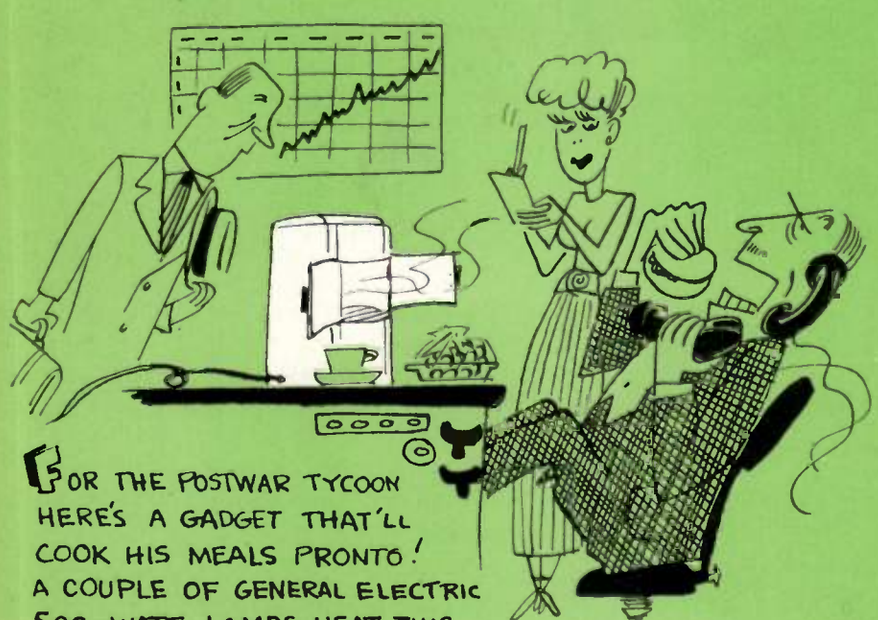
THRU HOPPY'S EYES

Some recent applications of General Electric products as interpreted by MONOGRAM Artist DeWolfe Hotchkiss.



ON THE LEVEL HERE'S A DEVICE THAT REALLY STICKS TO THE JOB! TWO G-E ALNICO MAGNETS HOLD THIS COMBO LEVEL AND ANGLE INDICATOR IN PLACE. ALSO (AT NO EXTRA COST) ONE EDGE IS CONCAVE TO FIT PIPES.

RADAR ON THE PROWL AGAIN - NOT FOR SUBMARINES BUT SARDINES. THIS G-E ELECTRONIC NAVIGATOR INSTALLED ON A SARDINE CARRIER SPOTS FISH SEINES THRU FOG, SLEET, AND GLOOM OF NIGHT PLUS!

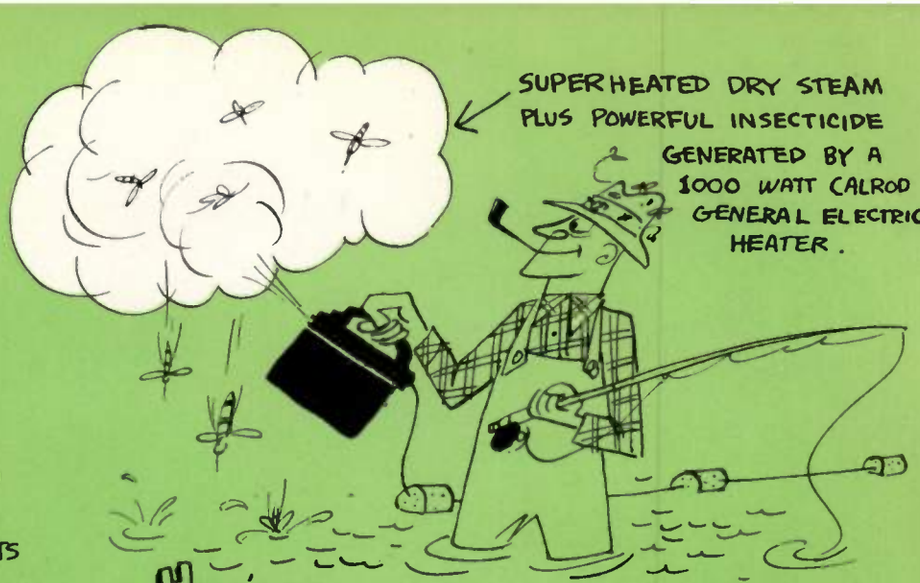


FOR THE POSTWAR TYCOON HERE'S A GADGET THAT'LL COOK HIS MEALS PRONTO! A COUPLE OF GENERAL ELECTRIC 500-WATT LAMPS HEAT THIS LITTLE STOVE WHICH WAS DREAMED UP BY AN EX GI. . IT'S FAST, CLEAN AND — NO DISHES (USE CELLOPHANE WRAPPERS, PLEASE)

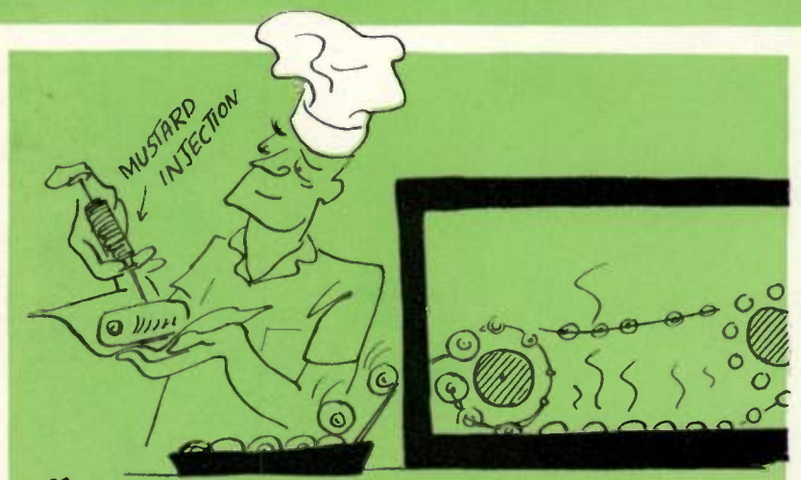
THE LAMP DEPT. TURNS ANOTHER NEAT TRICK WITH THIS GERMICIDAL LAMP. ON DISPLAY AT THE AMERICAN MEDICAL ASSOCIATION CONVENTION, CHICAGO, IT'S REALLY ROUGH ON MOLD AND BACTERIA

WRH

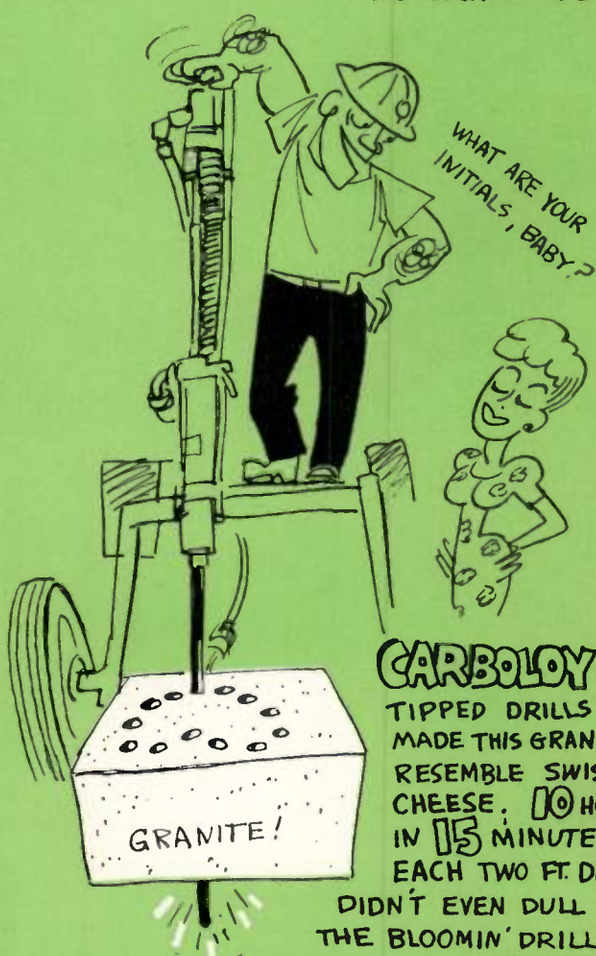
SHASTA + COULEE DAMS WILL SPORT NEW STREAMLINED GUARD RAILS LIGHTED BY FLUORESCENT TUBES. GENERAL ELECTRIC LIGHTING ENGINEERS MADE TESTS AND RECOMMENDATIONS ON A SAMPLE SECTION SHIPPED BY COLUMBIA ELECTRICAL CO., SPOKANE, WASH., MAKERS OF THIS RAIL.



HERE'S THE LITTLE GEM I COULD HAVE USED THIS SUMMER - A MADEWELL ELECTRO SPRAY NAMED (STEADY GIRLS) "TIGRESS". KILLS 92 OUT OF 100 COCKROACHES!



THIS IS IT MEN, THE CUSTOM-BUILT HOT DOG! THE MACHINE SPEARS THE POOR FRANK - ROLLS IT IN BATTER - COOKS IT IN FAT (G.E. HEATED - VOT ELSE) AND DELIVERS A TASTY "FRITTER-FRANK" READY TO CHOMPF.



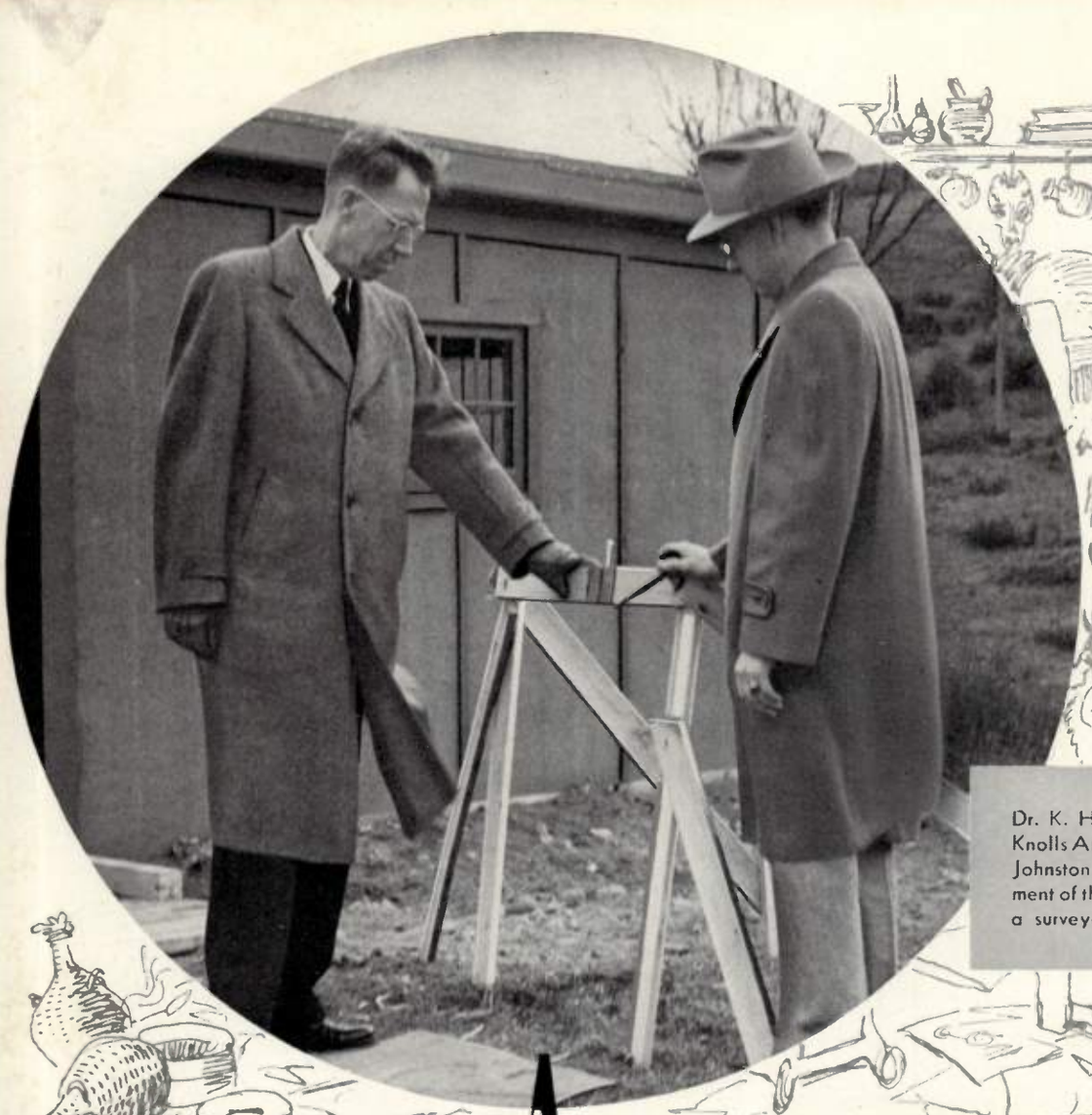
CARBOLOY

TIPPED DRILLS MADE THIS GRANITE RESEMBLE SWISS CHEESE. 10 HOLES IN 15 MINUTES - EACH TWO FT. DEEP. DIDN'T EVEN DULL THE BLOOMIN' DRILL!

(CARBOLOY "OPEN HOUSE" SHOW -'48)

WE WILL SOON KNOW HOW MUCH NAVY PILOTS CAN TAKE — IF ANY OF THEM LIVE. THE BOYS IN BLUE HAVE A HUGE & DIABOLICAL MACHINE WHICH WHIPS OUR "BIRDMEN" AROUND LIKE A HENHOUSE IN A TWISTER. NO THANKS, JIM; MAKE MINE A MALTED. OH YES — IT HAS A SPECIAL GENERAL ELECTRIC ACCELERATOR AND 4000 HOSSPOWER MOTOR!

EVERYBODYS WRITING UNDER WATER. NOW GENERAL ELECTRIC PLAYS RECORDS UNDER WATER. (NAT. ASSN. OF MUSIC MERCHANTS SHOW, CHICAGO) MAY I HAVE THE NEXT WALTZ?



Dr. K. H. Kingdon (left), director of the Knolls Atomic Power Laboratory, and L. E. Johnston, AEC official, discuss development of the new atomic power plant. That's a surveyor's bench mark between them.

From ATOMS *to* ELECTRICITY

General Electric will operate a new plant in upstate New York, where scientists hope to utilize the power of the atom to generate electricity

Photos by Howard Potter

THE atom in overalls! Atomic power harnessed for the benefit of mankind! As philosophers and alchemists of old dreamed of the transmutation of elements, so modern scientists and engineers dream of the generation of useful power from the energy locked in the atom.

That dream now shows promise of eventual reality. The first experimental atomic power plant devoted exclusively to converting nuclear energy into electric power will soon be constructed. An initial step was taken last fall when the U. S. Atomic Energy Commission announced that some 4500 acres of land in Saratoga County, N. Y., will be purchased for the new plant—to be operated by the General Electric Research Laboratory as a part of the Knolls Atomic Power Laboratory at Schenectady.

The ancient alchemists wanted to make gold; modern scientists want to produce power. They dream of using atomic fuel to generate electricity to propel ships and light cities. The major challenge is solving the scientific and engineering problems which must be overcome before the dream can be realized.

Dr. C. G. Suits, General Electric vice president and director of research, says the heart of the atomic power plant will be a nuclear reactor. However, unlike the atomic bomb's reactor, which dissipates all its energy in one violent explosion, a reactor designed to generate useful power will produce a continuous flow of heat, the intensity of which can be regulated. No details on the use of atomic fuel have been released, but here's the general picture:

Energy from the nuclear chain reaction is converted to heat inside the reactor; this heat is used to run a turbine which, in turn, drives a generator. In other words, the nuclear reactor takes the place of the furnaces in a conventional power plant.

The site of the new experimental power plant was chosen after extensive surveys. Considered were such factors as its nearness to General Electric and AEC scientific and technical facilities in Schenectady, the adequacy of water and power supplies, and underground rock formations sufficiently firm to hold heavy concrete structures. The size of the site was determined by safety and security requirements, considering the need for freedom of laboratory action, including work with radioactive materials. Also, the particular 4500-acre plot

Oil tanks which will hold fuel for construction machinery are located on the 4500-acre site in Saratoga County, N. Y.

The location contains several farmhouses reached only by dirt roads. About 30 families will be moved to make way for the experimental project. Core boring machines (see center illustration) were used for taking underground rock samples.

selected involves moving fewer people and uses land less suited for agriculture than other possible locations.

Some 30 families live on the site at present. Their land will be purchased to make way for the project. Both AEC and General Electric will assist in finding new homes for these residents, who will have from 6 to 18 months to resettle.

Geographically, the new plant will be near West Milton, 10 miles west of Saratoga Springs, 15 miles northeast of Amsterdam, and about 20 miles north of Schenectady.

Can atomic power compete economically with other forms of power used to generate electricity? Harry A. Winne, vice president in charge of engineering policy, doubts that it can, at least for some time to come, in areas where electric power is already abundant. However, it could be a tremendous boon to those areas of the world without natural power resources, where transportation costs are high—in arctic regions or deserts, for instance. Or it might be used to mine valuable ores in isolated mountain or jungle areas.

Even the gold-hunting alchemists would have labeled as fantastic one of the current dreams of modern scientists and engineers. They see future ocean-going liners and cargo vessels carrying atomic power plants instead of fuel oil. If it works, such a power setup would save considerable space, cut fueling time to almost nothing, and give ships almost limitless cruising range.

This brings us to another point which will be studied at the new experimental plant in Saratoga County. It's a process called "breeding," which occurs if the splitting of one atom of fuel produces more than one new atom of fuel. Who knows but this may some day supplement the world's ever-dwindling supplies of coal, oil and wood.

Since operation of the reactor will involve radioactive materials, Atomic Energy Commission and General Electric officials carefully considered what might happen if the reactor were seriously damaged. One definite conclusion: a bomblike explosion is not possible.

Intricate safety devices, which will be tested and re-tested frequently, will be built into the new plant. The chance of major damage to the reactor will be very

slim; it could happen only from sabotage, severe earthquake, or the remote possibility of simultaneous failure of all the many safeguards.

Since success of the experimental project will mean that atomic power plants will some day be used in populous areas, a major necessity is complete control of the reactor at all times. For the past two years the Knolls Atomic Power Laboratory has studied control mechanisms and safety measures. It is planned to make sabotage so difficult that its threat will be eliminated.

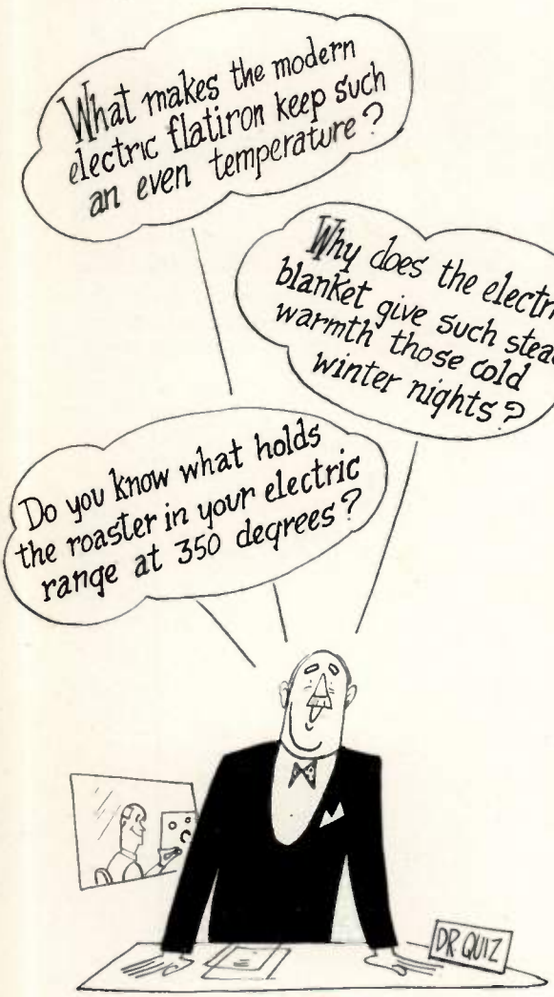
The new reactor which AEC and General Electric hope to use for generating electricity is one of two being designed for such studies. A different type of reactor but for a similar purpose is planned at the Argonne National Laboratory near Chicago. Men of science will use knowledge gained from these two, as well as from others, to learn how to produce power on a practical scale.

The new experimental power plant near West Milton isn't General Electric's first atomic venture for the AEC. The Commission's Hanford (Wash.) Works, which was built during the war to make plutonium for military purposes, is now operated by General Electric. Also, the Knolls Atomic Power Laboratory, launched in November, 1946, for atomic power research, is under construction on a 180-acre site near the Company's new Research Laboratory at Schenectady. Dr. Kenneth H. Kingdon is director of the Knolls Atomic Power Laboratory, of which the experimental project for generating electricity is a part.

And so another of the visions of mankind is one step nearer reality. Power from the atom may yet light our homes, turn the wheels of industry, and in countless other ways lighten the burdens of humanity—opening the door of progress to wonders as yet undreamed of.

thermostats

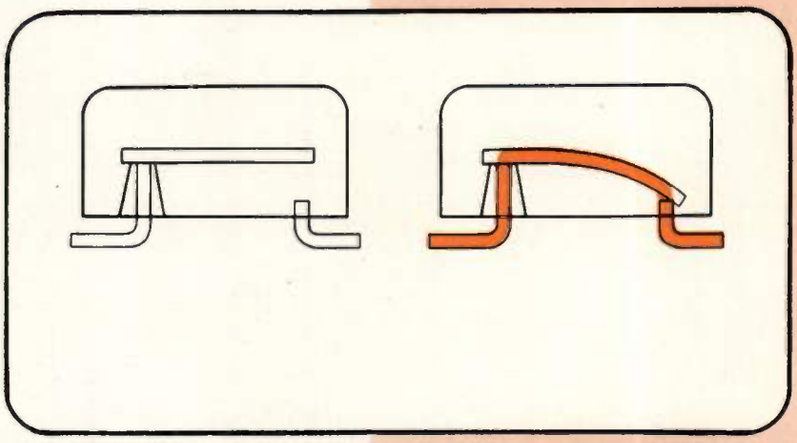
They don't get the limelight, but they play a very important role in electrical products



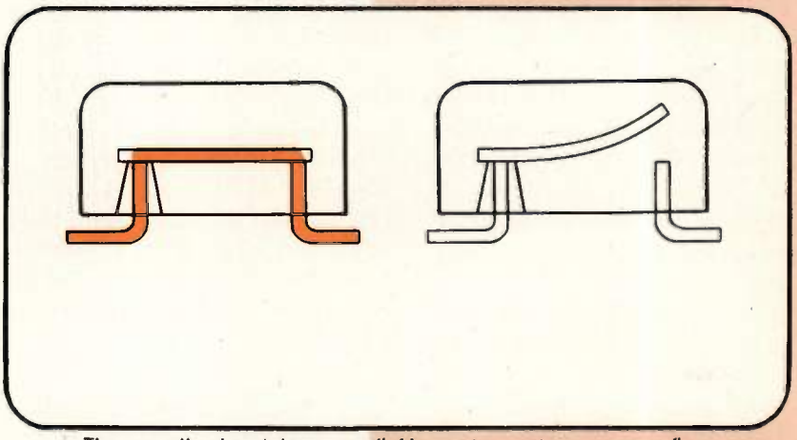
ANSWER:
It's all done with
THERMOSTATS

A THERMOSTAT is a simple but ingenious little gadget used in a wide variety of electric equipment nowadays. Many people have never heard of thermostats—but they use them daily.

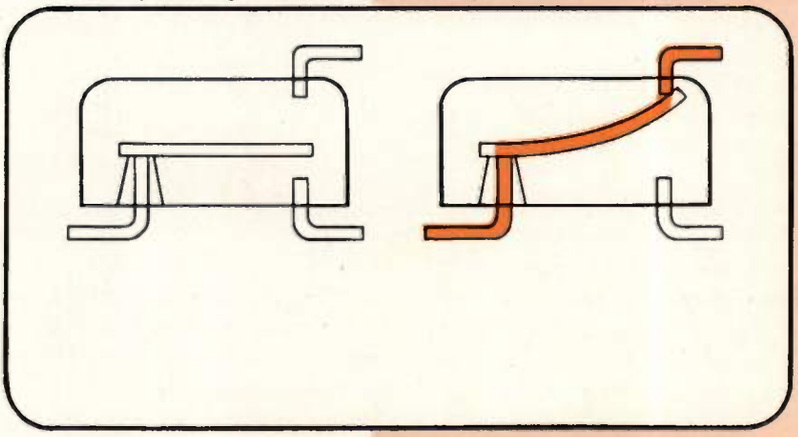
General Electric puts thermostats to work in many of its products, like circuit breakers, industrial control devices, home furnaces, cooling systems, ranges, water heaters, refrigerators, home freezers, and heating pads. The average layman probably doesn't realize that nine



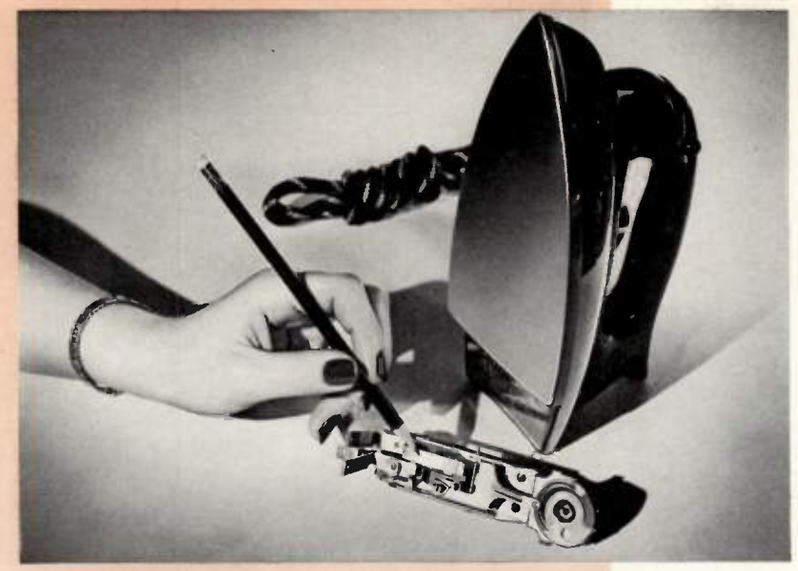
In the left drawing, the bimetallic (horizontal) strip of the normally open thermostat is unchanged at a "normal" temperature and no current flows. At right, temperature change causes the two-metal strip to bend and electricity travels through the completed circuits.



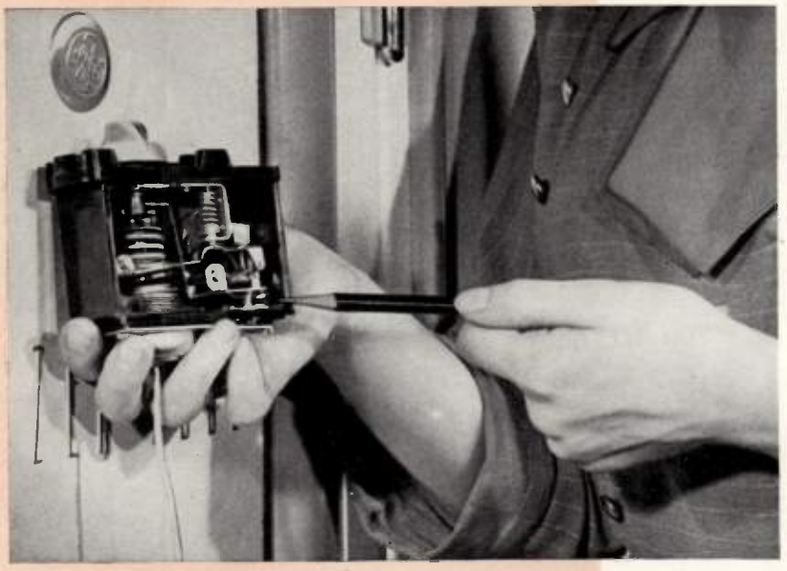
The normally closed thermostat (left) permits continuous current flow at "normal" temperature. A change, increasing the heat for example, makes one metal expand more than the other. The two-metal strip bends, breaking the circuit and stopping the flow of electricity.



This form of bimetallic thermostat controls two separate circuits, both dead at "normal" temperature. A temperature above "normal" bends the strip one way, closing one electric circuit; a temperature below "normal" bends it the other way, closing the other circuit.



FLATIRON The pencil points to the bimetallic-strip thermostat of an electric hand iron. Current is automatically shut off when the iron gets too hot, turns on again when iron cools off.



REFRIGERATOR Here's what keeps meats and vegetables cool in the General Electric refrigerator. An expanding gas in a bellows controls the temperature.

RANGE The electric range has a thermostat which uses a combination of expanding liquid and a bimetallic strip. Here, below the pencil point is a collapsible bellows; just above it is the bimetallic strip.

thermostats are employed in the electric blanket.

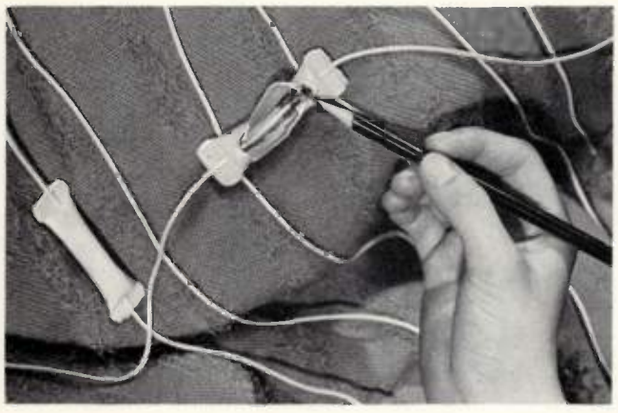
Thermostats, for the most part, are small gadgets. Their function is to control temperatures by making use of natural expansion and contraction of metals or liquids. If the flatiron gets too hot while your wife is talking on the telephone, the ever-alert thermostat shuts the electricity off. The current comes back on again after the iron has cooled down.

General Electric uses three main types of thermostats in home appliances: (1) the bimetallic strip (flatiron, water heater); (2) expanding gas in a bellows (refrigerator, home freezer); (3) combination of expanding liquid and bimetallic strip (range). All three work on the principles of expansion and contraction resulting from changes in temperature. Take the common bimetallic strip thermostat as an illustration. Here's how it works (see diagrams p. 18).

Different metals expand and contract at different rates when heated and cooled; that's the key to the bimetallic thermostat. Two strips of dissimilar metals are bonded securely together. As heat is applied to the two-metal strip, one metal will expand faster than the other and cause the strip to bend in the direction of the half which expands the least. Hence, you can see that by mounting a contact button on the end of the strip and making the strip do the work of a switch, an electric circuit may be turned on and off by changes in temperature.

A General Electric refrigerator's thermostat, which uses gas in a bellows, works on expansion and contraction principles, also. When the refrigerator gets too warm the gas expands, the bellows opens, and the contacts are closed, thus turning on the refrigerator motor. As soon as the refrigerator gets

Using an electronic sealing machine, these Bridgeport Works employees seal up the outside coverings of thermostats. Eight of the nine thermostats in a G-E electric blanket are safety devices.



This is a close-up of the thermostats found in the electric blanket. These ingenious little gadgets insure warm, restful sleep on cold winter nights.

The coffeemaker, a necessity in the everyday life of Americans, is equipped with a thermostat, too. Its contact points are indicated by the pencil, left.

cold enough, the gas contracts, the bellows closes, and the contacts separate, turning the motor off.

Expansion of a liquid is the principle of the main thermostatic control in the General Electric range. Here, however, a secondary bimetallic compensator is also used which gives steady, even oven temperature regardless of the temperature of the kitchen or other range parts.

General Electric thermostats are made in factories at Chicago, Schenectady, Erie, Ontario (Calif.), and Bridgeport. (Heating pad thermostats are assembled in Coxsackie, N.Y.) They're used in scores of different ways. The Apparatus Department uses them in its circuit breakers and industrial control devices; the Air Conditioning Department, in home furnaces, cooling systems, etc. The major user, however, is the Appliance and Merchandise Department, which incorporates them in many home appliances.

LETTER TO A REBEL*

Many movie scripts, divorced from screen action, make dull reading; this one, reprinted by permission of RKO Radio Pictures, Inc., is the human story of a boy and his dad—and you will enjoy and remember it.

THIS is the Town of Monroe. There are towns like Monroe in every county in the land, I guess—places big enough to have a parking problem, and still small enough so you can drop around to the postoffice at noon, as I do, and pick up your own mail.

But we're mean and crafty here in Monroe. At least that's what was meant by an editorial in my boy's college newspaper. We're all "corrupt tools of a depraved economy" was the way it was put.

That my son, Andy, was the proud author of this deathless prose startled me a bit. But, I figured, it's the same with college boy editors as it is with those of us who publish the "less enlightened" newspapers. We editors covet a reputation for fearless journalism, so we come out occasionally in favor of cattle-thieving, the abolition of baseball —or hoisting the red banner up the campus flagpole. Gets us talked about; helps circulation.

Still—I was disturbed. I looked at Andy's editorial again, and I realized that some day he'd be running the *Gazette*. I couldn't tell him *what* to think. But I wanted to be sure he *was thinking*. So I wrote him a letter. It wasn't brilliant—went something like this:

"Dear Son—and Fellow Editor:

"I just got my copy of your editorial describing how you're being squeezed between the dollar sign and the cent sign; how you're 'suffering' under our 'vicious capitalistic system.' I am touched, both by your predicament, and your request for a higher allowance.

"I can see you now, in your dormitory. I'll bet you've got another editorial in your typewriter, trying to explain what you meant by the first one, trying to prove that you're Thomas Paine and William Allen White and Andy Gregory all rolled up in one. And I'll bet you're having a tough time doing it.

"You'll be pleased to know that you come from a long line of outspoken liberals. But you'll probably be shocked to discover that they were practically all capitalists.

"You know that old flintlock rifle we keep over the mantelpiece—the one I showed you how to handle for the high school history pageant last summer? Well, that rifle belonged to an ancestor of yours—a 'big businessman' if you will, from Cambridge, Mass. He carried it up Bunker Hill and finally dropped it, in his own blood, along the Brandywine. He was a liberal, if you want one—a revolutionist, a rebel, like you. But he wasn't fighting against the profit system. He was fighting for his share of it—and his family's—and his country's.

"And there was your great grandfather. He was considered a barn-burning radical, back in the 1850's. That was

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* Produced by Jay Bonafield; directed and photographed by Larry O'Reilly; supervised by Phil Reisman, Jr.; narrated by Dwight Weist; written by Oviatt McConnell; edited by David Cooper; music by Nathaniel Shilkret. Distributed by RKO Radio Pictures, Inc.

before he came to Monroe and started the *Gazette*. He put out Abolitionist newspapers in Copperhead communities. His papers, naturally, were never popular, and he was run out of town after town because he was against slave labor and believed in human rights and the dignity of man. I guess that would make him a liberal by any definition.

"You know, of course, son, that I am a capitalist. Oh, I don't wear a plug hat or have dollar signs all over my vest. But I own the paper and employ the help—'slaves,' you'd call them—who labor for the wages they use to buy the things that are advertised in the paper they put out. But advertising is the only space I have for sale. It's my paper, and when Chief Bill Mack comes into the shop, it's usually to give

me the latest standings in the Department Bowling League, and not to rewrite my editorial page. You take that kind of free enterprise for granted when you don't have a police state.

"Speaking of the editorial page, I'm aware of my responsibilities, too, just like you 'liberals.' Last month we got after the Thompson bus people, who seemed to think their franchise was a license to steal. I'm not trying to kid you, son, that my squad always wears the pure white jerseys. Catch a man clipping—blow the whistle on him, I say, no matter whose team he's on. Thompson's school buses were traveling death traps. We let the people know it. And they let the Town Board know it. We got the new buses yesterday.

"Seems to me your newspaper's all for throwing out the whole capitalistic system just because some capitalists are bad. Which would be like old Shorty Stevenson throwing out a whole barrel of apples because he found a few worms in 'em.

"I don't suppose you were thinking of Stevenson's grocery when you were curling your lip at free enterprise. He's been serving his community across the counter for 28 years, six-till-six, six

days a week—and delivers phone orders after hours. Yes, Shorty's a capitalist all right. But it'll be a long time before he buys his first yacht.

"Maybe the Supermarket fits your pattern better. That's 'Big Business,' with a board of directors. They're tough competition for the corner grocery, because they can buy in bulk, sell cheaper, and display a greater variety.

"But look at it from the viewpoint of the consumer—whom you call the 'little man.' Come vacation time, you'll be in there for sure, buying all that canned pineapple we have to eat when you're home. That fruit grows in Hawaii. It's raised and picked and canned—and shipped 3000 miles. Then it crosses America by rail, and comes here by truck. I guess a lot of people make a profit. But just ask your economics prof how many rubles it would take to buy a can of pineapple that costs you 27 cents.

"Another thing, while I think of it. I notice that when you're home in this 'reactionary community,' you don't travel much on your poor proletarian feet—although your bourgoise and broken-down old man often does. Unless we happen to be going in the same direction and I'm lucky enough to hitch a ride in my own car.

"I must admit, though, you take pretty good care of the old bus. However, it must gall you somewhat to have to deal with the 'vested interests,' like the monster oil industry, where all you have to do is say the magic words 'fill 'er up,' and they pump the stuff out of the ground down in Texas, push it a thousand miles through a pipeline, refine it, ship it up the coast by tanker, truck it to Morse's gas station and dribble it into your tank. And all for a few cents a gallon, plus tax. Yes sir! You sure get my money's worth.

"I guess I threw you a curve that time, Andy. Well, here's the straight pitch. Remember the strike at Tony's coal and lumber yard? You probably had a few friends in that picket line. Ever think what would happen to them if they struck for more wages or less hours in one of those Utopias behind the Iron Curtain? Over there, I'm afraid Chief Mack couldn't be neutral. He'd have to liquidate them as enemies of the state. For remember this: free unions are found only where there is free enterprise. Ours is the only system in the world which allows the laboring man, through his union, to regulate his own wages, welfare, and working conditions.

"Let me put it this way: Where else in the world does a union man drive home from the job in his own car?

"Speaking of cars, I was down at Al Plank's garage yesterday and saw that new one of ours that you've been hearing about since 1941. I hope your political conscience permits you to drive it—because it's a better sermon on the American system than I can preach. For, out of every dollar on the price tag, 75 cents went to labor. And, after

overhead and taxes, what was left—seven cents—was profit. Seven cents to the dollar seems like a mighty slim margin for one of your supposedly profit-swollen big industries.

"But the profit system can be the profit-and-loss system, too—as the railroad found out not long ago, when its spur line to Kingwood rusted into an expensive right-of-way and a garden of ragweed 25 miles long. And all because the Magruder boys, and a couple of their friends, came out of service, got themselves a flock of second-hand and

surplus trucks, and proved that they could pick up the farmer's produce right at the barn door and rubber-tire it to the main line cheaper and easier than the railroad. So, 'Big Business' had to surrender to free enterprise.

"You see, our system *does* work for the little fellow. I remember, years ago, when Pete Mitchell took over the Inn

at Middletown (incidentally, he just put in the Hambletonian Room for the trotting crowd). He started the business serving two meals the first day. Now he serves over 12,000 a month. Maybe that's what you mean by 'predatory capitalism.' But to me it's the realization of that old American dream: independence.

"Actually, you will be saddened to find that our town, and most towns like it, are 'seething hot-beds of free enterprise.' I get around a bit for the paper, and I'm constantly being exposed to the 'subversive poison of salesmanship.' I guess I've bought more trick razors than any of Al Pheiffer's other customers. I'm also a sucker for his Pipsissewa Tonic and Trailing Arbutus Water. But with all the gadgets and notions he's sold me, Al has never stung me yet.

"Incidentally, I seem to recall your having a good, old-fashioned, 12 o'clock toothache last summer. Well, Al Pheiffer, the capitalist who got out of bed in the middle of the night to help soothe your pain, doesn't seem to fit your editorial picture of a money-grabbing businessman now, does he?

"I'm sure, Andy, that when you're home on vacation you're not going to let your economic theories stand in the way of your having a good time. But you know, around Monroe, you act kind of like a capitalist yourself.

"Seriously, Andy, I know that free enterprise doesn't make everyone's every meal a Sunday dinner. It can break down. But, when we make it work, it gives us the highest standard of living on earth. For nowhere in the world do so many people have so much of the good things of life.

"Maybe you'll find the answer sooner than I will, son. Me—I guess I know mostly what I print in the paper. But your mother and I went strolling over by the old grist mill last Sunday. That mill ground corn, free of charge, for Washington's army. But the farmers paid a fair price and, from the increase of his capital, the miller could build a home and rear his family and bequeath some money to help build the church.

"He's buried there now, along with generations of townsmen, rich and poor, who shared a common faith in God and the American way.

"You are enrolled, son, without a license from any commissar, in a free and liberal institution—one, like many in our land, which was founded on the generosity of men who had something to share. Notice, on your way to class sometime, how many buildings are there for your use, because someone was able and generous enough to fulfill a need of yours and your classmates. It might be interesting to know where the money came from that supports the scientific research being done on your own campus for the benefit of you and your posterity. Think how few of your classmates would be there at all if it weren't for endowed scholarships—and how many professors are holding academic chairs provided by private funds.

"The next time you go to the library for study materials or relaxation—or to do research for one of your blow-torch editorials—rummage around in the stacks and open a few books to their inside cover. Notice how many books have been donated by people who have given the richest gift of all: knowledge.

"These books are the wealth with which any man can be a capitalist. Invest your time in them, and spend the dividends the rest of your life. Read them all—Karl Marx, if you must—and be one of the first young 'liberals' to be able to wade through the whole thing. And, while you're at it, read that other 'radical' handbook, *Mein Kampf*. For, remember: you're reading in a country where the police aren't interested in the title on the cover—as long as you don't block traffic.

"But don't close your mind to the spirit of your own proud land. Don't draw a voluntary iron curtain across your mind. Read Alexander Hamilton—and the writing of Thomas Jefferson. Read the newspaper. Read the newspaper—front page, sport page, comic page, and editorials. And, since you're already in the newspaper business, especially read the dictionary.

"I say this earnestly, son, because words are beginning to lose their meaning. *Capitalist* has become a dirty word. And the same thing is happening to *liberal* and *democracy* and *peace*. These words should be tools. And they're being used as weapons. Maybe when you're most confused, it would help if you defined each of these words like this: the way we want to live in Monroe. For Monroe—or anybody's home town—is really our country in microcosm.

"You see, it's not just your country, son. It's mine, too—and my grandchildren's, and their grandchildren's, and a lot of other people's. Remember that, the next time you want to tear it apart and put it together again with slogans. Criticize it, if you must. But improve it first; make it better. Whatever you do, don't sell it short. For remember this is your heritage from the past. This is your legacy to the future. This is America!"

BLUE RIBBON DOGS

The dogs need no special grooming before entering a show. Owner Montgomery brushes them daily, cleans them once a week by wetting his hands and rubbing them briskly over dogs' hair.

Photos by George Burns

When Harry Montgomery, of the Transformer Division at Pittsfield, bought his first Irish Setter as a pet, he didn't realize that he'd soon be raising champions

Montgomery was transformer specialist in Chicago and Cleveland before transferring to Pittsfield.

THERE are two subjects you can't stump Harry Montgomery on—transformers and dogs. Obviously there's no connection between the two, except Harry's thorough familiarity with both. It's easy to understand why he knows transformers (those things that change electricity from one voltage to another); he's been in the business about 30 years.

He joined General Electric in 1917, two years after his graduation from the University of Delaware, and his interest focused on transformers during his Test days. He acted as transformer specialist for many years in Chicago and Cleveland. Then, in January, of '47, he was called to Pittsfield to be general assistant in the Distribution Transformer Sales Division. It's a big business, running close to 50 million dollars a year. But Harry handles his job with the skill and confidence of long experience.

His length of service with dogs isn't so extensive—only six years, in fact. But since 1942, when he acquired a sprawling puppy that grew into a famous show dog, Harry has become an authority on Man's Best Friend—particularly Irish Setters, those aristocratic creatures with red-brown hair and sadly beautiful faces. Harry and his wife Beryl own three of them. The two older ones, Patsy and Red, bear dogdom's proudest title, Ch.* Their official names are Classic of Tercor and Red Coat of Tercor. They are the parents of the third dog, "Clancy." He hasn't been exhibited yet, but indications are that he will uphold his family's illustrious reputation.

The dogs are descended from a long line of champions. Patsy's great-great-grandmother, Ch. Redwood Rhoda, was and still is considered the most nearly perfect representation of the Irish Setter breed. After her death she was mounted and is on display at Yale University.

The Montgomerys are still rather amused at Patsy's triumphs, considering their casual acquisition of her. They happened to be driving through Bernardsville, N. J. in August, 1942. Seeing a sign advertising Irish Setters at the Tercor Kennels, they decided it would be nice to have a pet. So they paid $50 for an unpresumptuous puppy which, in the judgment of the kennel people, showed little promise of being a show dog. When Patsy grew up, someone noticed that she bore a remarkable resemblance to her famous ancestor and suggested that she be entered in a show. She was—and came home with the blue ribbon.

* To be a champion a dog must be a fine example of his breed and must win the required number of points in recognized dog shows, according to the rules of the American Kennel Club.

When she was three years old her owners thought she should have a companion and bought her young half-brother, Red Coat of Tercor. For him they paid $200, the price of a champion-to-be. But, competing against each other in one of the big New England shows last year, Red was outshone by Patsy, who went Best in Show and Best of Breed. (Red was runner-up.)

In the course of time the two dogs became the parents of a litter of seven puppies, Clancy among them. All three dogs are good hunters. Patsy has what is known in hunting circles as a "good mouth." This she demonstrated dramatically at a tender age. Mrs. Montgomery's pet canary escaped from its cage and as she frantically tried to protect it from the onrush of the puppy, Patsy retrieved it without wetting a feather.

Learning to understand a dog's ways has become a fascinating hobby with the Montgomerys. They have made themselves experts on the subject of dogs—by studying them, by talking to authorities, and by reading everything they can get their hands on concerning dogs.

The Life of Riley

Do these very special pets get special care? Well, rather! They have their own tooth brushes, their own bedroom with made-to-order beds complete with feather mattresses. (This isn't a deliberate attempt to make sissies out of the dogs. The soft mattresses prevent their coats from being worn in any spot.)

Their diet is carefully regulated: a snack in the morning and a square meal at night. But Harry admits slipping them something on the side occasionally, if his wife isn't looking—and Beryl allows she sometimes does the same thing.

The Montgomerys deny, however, that there is anything special about this careful upbringing. They simply treat their dogs with the kind of thoughtfulness accorded to people they like. A dog, they feel, is more like a human being than any other animal on earth—the only one that willingly leaves his own kind and lives with man.

Patsy, Red and Clancy reward their owners by being affectionate, obedient, and remarkably intelligent. The two older dogs understand about 200 words. Their owners often have to resort to spelling certain words if the dogs are within earshot.

The Montgomerys refuse to take credit for their dogs' good behavior. Proper treatment, they believe, merely allows the dogs to manifest their own natural intelligence.

Four-year-old Ch. Red Coat of Tercor was shown 13 times in one year, was beaten only once by his own sex.

Mrs. Montgomery looks over the dogs' trophies, realizes that a lot of sterling silver has to be kept polished.

At her master's order, Patsy posed obediently for the camera with her "Best in Show" ribbon.

the Bulletin Board

ORGANIZATION CHANGES

GENERAL

G. G. MONTGOMERY: member of the Board of Directors.

F. M. CLARK: engineer, Insulation Div., Gen'l Eng'g & Consulting Lab.

DR. J. H. HOLLOMON: assistant head, Metallurgy Div., Research Laboratory.

Technical Personnel Divs.—M. M. BORING: manager. K. B. MCEACHRON, JR.: manager, Technical Education Div. C. F. TERWILLIGER: manager, Technical Recruiting Div.

R. W. TURNBULL: responsibility for customer relations in Northwestern District in addition to present duties (comml. vice president, San Francisco).

AIR CONDITIONING

Automatic Heating Div.—H. M. BRUNDAGE: manager. R. F. HERTEL: eng'g manager. F. C. KURUNG: manufacturing manager. L. H. HOBSON: sales manager. G. L. DESO: accountant.

Marketing Div.—H. B. DONLEY: marketing manager. L. H. MATTHES: gen'l sales manager.

Remote Equipment Div.—P. E. MILLS: manager of manufacturing.

APPARATUS

W. V. O'BRIEN: general sales manager.

C. H. RIDGLEY: staff of the manager of engineering.

C. W. BRYANT: ass't production mgr.

C. A. SALMONSEN: acting manager, Aircraft Gas Turbine Divs., in addition to his regular duties.

W. B. BOOTH: plant manager, Johnson City, N. Y., Aeronautics Mfg. Div.

Fractional Horsepower Motor Divs.—W. W. WARNER: comm'l engineer. J. H. STAAK: application engineer. G. T. WRIGHT: manager, Pricing & Promotional Service Div.

Lighting & Rectifier Divs.—C. E. HAMANN: manager, Rectifier Sales Div. I. A. LEE: sales manager, Plating & Truck Charge Rectifier Section. G. C. RUCKEL: sales manager, Automotive & Radio Rectifier Section. L. W. BURTON: application engineer.

Transformer & Allied Product Divs.—B. W. MAHONEY: assistant manager of manufacturing. H. N. SPOHN: assistant accountant.

Turbine Divs.—W. W. KUYPER: engineer, Turbine, Generator & Gear Eng'g Divs., Lynn. L. J. COLLINS: engineer; J. J. ZRODOWSKI: designing engineer, Gear Eng'g Div.

Welding Divs.—A. F. VINSON: manager. C. I. MACGUFFIE: manager of sales. R. C. FREEMAN: mgr. engineering.

W. E. LYNCH: assistant manager, Transportation Div., Central District.

W. J. WOODS: manager, Buffalo Office, New York District.

MORRIS RHINE: assistant to manager, Pacific District.

R. M. EICHNER: manager, Corpus Christi, Texas sales office, Southwestern District.

J. R. MURPHY: manager. R. E. WINN: auditor. P. L. DILLON: manager, Eugene, Ore. sales office—Northwestern District.

F. E. STRAUSS: engineer and superintendent, Control Div., Oakland Works.

APPLIANCE & MERCHANDISE

A. N. BECVAR: director, Appearance Design Div.

W. H. DENNLER: manager, Electric Vacuum Cleaner Div.

J. F. STARK: sales manager, sunlamp & heater section, Automatic Blanket & Sunlamp Div.

M. P. PAINTER: manager, Brockport, N.Y. plant.

MISS LURA J. ALKIRE: manager, Consumers Institute.

CHEMICAL

Engineering Div.—DR. C. E. REED: manager. DR. J. J. PYLE: manager, New Product Development Lab. T. N. WILLCOX: manager, Methods & Eqpt. Lab.

C. H. SLAYTON, JR.: manager, Facilities Engineering.

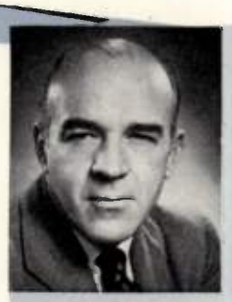
H. M. BRUSMAN: employee relations manager.

M. P. SMITH: department comptroller.

E. M. SHULTES: counsel.

Chemicals Div.—J. L. MCMURPHY: manager. C. S. FERGUSON: engineering manager. J. A. ZELLHOEFER: sales manager. R. A. RIEKER: accountant. E. T. KILGORE: assistant to manager, silicones. DR. J. R. DONNALLEY: manager, Waterford Plant.

Plastics Div.—H. K. COLLINS: manager. F. W. WARNER: engineering manager. R. O. BULLARD: manufacturing manager. D. S. MCKENZIE: sales manager. E. H. GABEL: accountant. A. C. TRECCE: assistant to manager, laminated products.



H. B. Donley
Air Conditioning

H. M. Brundage
Air Conditioning

W. V. O'Brien
Apparatus

A. F. Vinson
Apparatus

R. C. Freeman
Apparatus

C. I. MacGuffie
Apparatus

A. N. BecVar
A.&M.

W. H. Dennler
A.&M.

H. H. Watson
Construction Materials

C. C. Walker
Construction Materials

CONSTRUCTION MATERIALS

C. C. WALKER: general manager.
A. W. GILMORE: manager of marketing.
J. H. CRAWFORD: sales consultant.
E. J. HARRINGTON: manager of manufacturing.
C. H. BLACK: manager of engineering.
H. H. WATSON: commercial engineer.

Wiring Device Div.—J. R. MURRAY: manager of manufacturing. J. J. RYAN: assistant to manager of manufacturing. C. A. LINDEMANN: manufacturing engineer. E. G. HOPKINS: materials manager. J. B. CORRIGAN, HARRY HILL: production superintendents. R. F. HINCKLEY: product promotion manager.

W. R. BECKER: sales manager, Conduit Products Div.

R. L. PRIESTLY: factory manager, Norfolk Plant.

ELECTRONICS

G. G. GABEL: manager, Syracuse Service Div.

T. A. MCDONALD: manager, Market Services Div.

F. P. BARNES: sales manager, broadcast equipment; L. W. GOOSTREE, JR.: sales manager, marine electronic equipment, Transmitter Div.

Tube Divs.—J. T. THOMPSON: sales manager, replacement tubes. Cathode Ray Tubes—G. F. CALLAHAN: engineer, design & application engineering & standardizing. H. R. HEMMINGS: in charge of purchasing. R. L. KRAPF: in charge, accounting & financial.

LAMP

F. F. HARROFF: general manager.

H. A. OLSON: manager; P. H. GANTHER: assistant manager; J. C. FORBES: engineer, New York Sales District.

E. G. AGEE: manager, Atlantic Sales District (New York City).

K. C. LARABEE: manager, New Jersey Sales District (Newark).

H. E. HUFF: manager, Niagara Sales District (Buffalo).

D. M. WARREN: manager, Mohawk Sales District (Albany).

NUCLEONICS

O. H. GREAGOR: assistant manager, Technical Divs.

AFFILIATES

Canadian G.E. Co.—W. E. ROSS: assistant to president. A. M. DOYLE: manager, Apparatus Dept. J. A. BELL: director of purchasing. D. R. MCGREGOR: engineer, Industrial Control Div. W. A. IRVINE: manager, Montreal Works.

Carboloy Co., Inc.—F. C. RITNER: vice president, engineering and research. J. R. LONGWELL: asst. to president.

G.E. Credit Corp.—H. T. LEES: manager, East Central District. P. G. SCHREINER: manager, Jamaica, N. Y. Office. S. R. SWANSON: manager, New York Office. E. L. WATSON: manager, Dallas Office.

G.E. X-Ray Corp.—O. L. DUNN: comptroller. J. L. ROSE: treasurer & assistant secretary, G.E. Medical Products Co. A. M. WEST: merchandising manager. J. E. WATKINS: manager, Product Dept. R. F. HOLSTE: manager, Industrial Section; E. D. TROUT: manager, Therapy X-Ray Section; H. J. HOLMQUEST: manager, Electromedical Section; L. B. WHELAN: manager, Supply Section; G. D. OSTERUD: manager, Diagnostic X-Ray Section; Product Dept. H. O. MCKENZIE: manager, Service Dept. W. G. S. SOUTHAM: manager, Montreal Office. G. A. WELMAN: manager, Washington D. C. Office. C. W. LAUGHLIN: manager: Minneapolis Office. S. R. HOLLANDER: manager, New York Office. G. B. CLARK: manager, Hartford Office. J. P. CORKILL: manager, Newark Office. D. F. BOYLAN: manager, Albany Office. W. A. DUNN: manager, Rochester Office. R. L. HOWES: manager, employee & community relations.

Hotpoint Inc.—A. H. BEHNKE: vice president in charge of materials.

Locke Inc.—HOWARD WILLIAMS: assistant secretary

Trumbull Electric Mfg. Co.—Y. T. CHANEY: manager, distribution systems sales. W. A. EDWARDS: manager, switch, breaker, control sales. G. H. SAHLER: manager, marketing research.

RETIREMENTS

E. W. ACKERMAN: Advertising & Sales Promotion Divs., Apparatus Dept.; 42 years.

A. L. ATKINSON: manager, Vacuum Cleaner Div., A. & M. Dept.; 42 years.

R. L. BEACH: packing engineer, Apparatus Dept.; 41 years.

F. X. BRUGGER: assistant to the manager, Pittsfield Works; 45 years.

GEORGE CAMPBELL: manager, Buffalo Office, New York District; 41 years.

G. S. DELP: Philadelphia Apparatus Office; 46 years.

E. B. EDWARDS: Locomotive & Car Eqpt. Sales Div., Erie Works; 35 years.

W. A. HOLLAND: Switchgear Divs., Philadelphia Works; 44 years.

K. M. HOLT; engineer, Steam Turbine, Generator, & Gear Eng'g Divs., Lynn; 40 years.

C. F. JOSS: motor specialist, Los Angeles Office; 28 years.

A. S. MOODY: commercial vice president, Portland, Ore.; 42 years.

A. C. STEVENS: manager, Educational Service Div.; 31 years.

E. N. TWOGOOD: engineer, Gear Eng'g Div., Lynn; 38 years.

P. J. WALTON: application engineer, Philadelphia Apparatus Office; 43 years.

DEATHS

G. J. CHAPMAN: assistant manager, A. & M. Dept.; October 19.

D. C. DURLAND: chairman of board, Canadian G.E. Co.; October 19.

G. A. FREI: retired from Newark Lamp Works; November 10.

H. A. HAGADORN: retired from Bridgeport Works; October 27.

D. G. THOMPSON: manager of manufacturing, Heating Device & Fan Divs. A. & M. Dept.; November 9.

COMPANY NEWS

A $3,000,000 motor manufacturing plant was opened in San Jose, Cal. in November by the General Electric Company. The new factory ultimately will produce all of the Company's output of single-phase capacitor integral motors.

Pioneering in the new field of hospitalization insurance for pensioned employees, the Company has adopted a $5,865,827 experimental insurance plan providing cost-free hospitalization benefits for certain eligible pensioners, President Charles E. Wilson has announced.

President Charles E. Wilson has received the American Ordnance Association's Crozier Gold Medal for his distinguished service as vice chairman of the War Production Board during World War II, and for his leadership in the fields of science and industry.


H. K. Collins
Chemical


J. L. McMurphy
Chemical


F. F. Harroff
Lamp


C. E. Reed
Chemical


G. F. Callahan
Electronics


A. H. Behnke
Hotpoint

Speak for yourself "JUNIOR"

Walkie-Talkie refrigerator "wows" his audiences—sells products

ONE effective technique of the salesman is to hand out samples *to let the product speak for itself*. Engineers and sales promotion specialists of the Appliance & Merchandise Department took a cue from that technique. Last year they rigged up a refrigerator with gadgets to make it not only speak for itself, but walk, roll its eyes, open and close its doors, and slide its shelves as well—in fact, everything except lie down, roll over, and play dead.

In what was probably one of the neatest promotional stunts of the year, a standard NH-8 refrigerator was given a *papier mache* head, a phantom voice, and power to move about like a mechanical man. This "walkie-talkie" soon took on a personality. It became affectionately known as "Junior."

A Veteran Trouper

Today, like a Charlie McCarthy, Junior plays before audiences up and down the country—at county fairs, appliance stores, and expositions. He jokes, demonstrates his human likeness, and promotes products. He's been called upon to do just about everything from acting as official host of the Florida State Fair to telling kiddies bedtime stories over the radio.

Secret of Junior's operation is not revealed to his audience. And nothing suspicious is visible. The simple explanation is *radio*. The operator, concealed in a booth made of one-way vision glass through which he can see but cannot be seen, operates seven transmitters to control receivers which govern action of Junior's body.

Operator Bill Phoenix, who is concealed in a booth made out of one-way-vision glass, controls the seven radio transmitters that make Junior tick.

After his first few performances, Junior became so popular his foster parents found it advisable to give birth to two additional "Juniors." In one year these units have traveled about 25,000 miles. They've given well over 4000 performances to audiences numbering, by conservative estimates, over two million. Yet in over 600 days of operation (three units combined) only seven days have been lost through mechanical failure. Maintaining that record has meant yeoman work. To meet one engagement, the operators were on their feet working over Junior's innards for 63 continuous hours.

Such do-or-die spirit has been justified. Junior has not only helped to promote the sale of General Electric refrigerators, he's materially helped the sale of everything from G-E Coffee Makers to entire G-E kitchens. And even more important is the excellent job he's done in selling the Company to the consuming public.

As one Tennessee farmer so aptly put it, "Any outfit that kin make 'em walk and talk shore ought to know how to make 'em refrigerate."

NOW!
Plenty of fluorescent lamps!
Two new fluorescent lamp colors!
A new 85-watt fluorescent lamp!
...ALL FROM

1. **FILL EMPTY SOCKETS—GO AHEAD WITH MODERNIZING!** For the first time ever, you can get all the General Electric fluorescent lamps you want—to bring your lighting back to peak efficiency and to make new installations. So no need to wait any longer! See your G-E Lamp supplier today.

2. **FOR NEW FLUORESCENT LIGHTING EFFECTS,** use these two new G-E fluorescent colors. New G-E "Soft White" provides subtle flattery for complexions, foods, and surroundings. New G-E "Warm Tint" gives the familiar color values of incandescent light.

3. **MORE LIGHT FOR YOUR MONEY!** The new 85-watt G-E fluorescent lamp gives you as much light as the 100-watt fluorescent lamp it replaces. Designed for use with existing 100-watt equipment. Uses a rare gas, krypton, for greater efficiency.

TO MAKE THE MOST of these great new G-E fluorescent lamp developments, call your G-E lamp supplier. He'll help you work out fluorescent lighting that will do the best job in your factory, store, office, theater, or other place of business.

See your G-E lamp supplier today or call your nearby G-E lamp sales office.

Lamp Department of General Electric Company, Nela Park, Cleveland, Ohio.

G-E LAMPS

GENERAL ELECTRIC

DESIGNED BY GENERAL ELECTRIC AT NO. 1 PLASTICS AVENUE

Original suggestion for packaging, designed by General Electric.

A G-E PLASTICS PACKAGE

To please a man with pipe dreams

• Here's a pipe mixture package to warm the heart and bowl of a pipe smoker! General Electric designed it to sell tobacco to the man who likes to blend his own smoke. And there's extra sales appeal in the base of the package. It's a handsome plastics pipe rack...as masculine as an old briar.

This package is merely a suggested design —it is *not* a stock item. However, if the idea appeals to you, the design may be yours. Or whatever your requirements may be, we can carry your packaging plans from drawing board to delivery platform. For General Electric offers you a *complete* plastics packaging service—facilities for designing, engineering, and molding any plastics product.

What is your packaging problem? Are you thinking of marketing a new product, or have you an old one that needs a face-lifting? In either case investigate this General Electric service. It may save you money, boost your sales. Write to Section AB-8, Plastics Division, Chemical Department, General Electric Co., 1 Plastics Avenue, Pittsfield, Massachusetts.

GENERAL ELECTRIC

CD48-F4

EVERYTHING IN PLASTICS