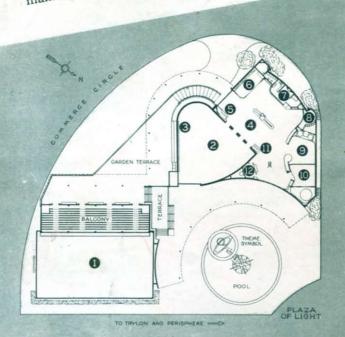
The General Electric Building is made up of three main sections—Steinmetz Hall, the "House of Magic," and the main exhibit area. Man-made lightning is demonstrated in Steinmetz Hall; scientific developments from the General Electric Research Laboratory are presented in the "House of Magic"; and television, X-ray, home appliances, and lamp-blowing are shown in the main exhibit area.

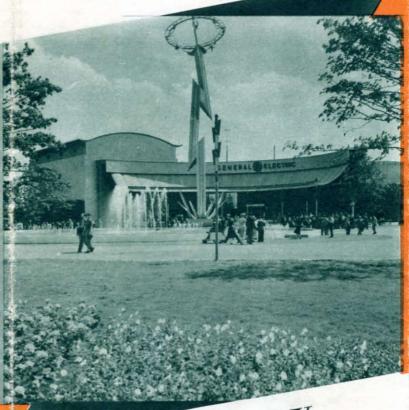


- 1. Steinmetz Hall
- 2. The House of Magic
- 3. Rockwell Kent Mural
- 4. Main Exhibit Hall
- 5. Lamp Display
- 6. Television Receiving Booth

- 7. Phantom House
- 8. Television Studio
- 9. Magic Kitchen
- 10. Marionette Theater
- 11. Information Booth
- 12. X-Ray Exhibit

GENERAL ELECTRIC

THE 1940 GENERAL & ELECTRIC BUILDING

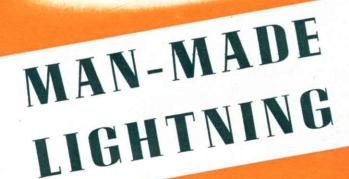


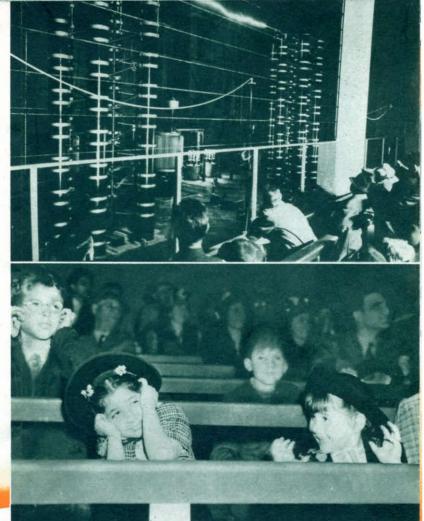
NEW YORK WORLD'S FAIR 1940

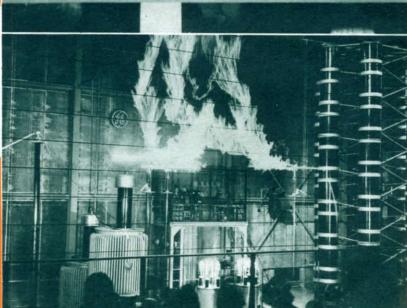
LIKE a lightning bolt in your living room, but without the element of danger, is the crash of 10,000,000 volts of electricity in front of your nose in Steinmetz Hall. Here engineers have created and harnessed thunderbolts rivaling nature's own in intensity. Climaxing this most spectacular of all demonstrations is a display of high-voltage fireworks of awe-inspiring beauty.

Named in honor of the late Charles P. Steinmetz, one of General Electric's greatest scientists, Steinmetz Hall stands in tribute to the man who first suggested that lightning be studied in the laboratory. Inside is the 10,000,000-volt lightning generator, most powerful in the world. This equipment, a streamlined reproduction of that in the G-E high-voltage laboratory at Pittsfield, Massachusetts, consists of two banks of tall black columns which store the electric charge. The lightning bolt, a 30-foot flash of fire, hurdles the space between these banks. Other lightning bolts are made to split logs of wood, strike a model Trylon and Perisphere, and change a fine wire strung between the generators into a shower of molten metal.

If you are terrified by these lightning bolts, hold your seat, hold your ears, close your eyes—but stay through for the final demonstration of a gorgeously colored sustained arc, a tremendous triple flame which climbs to the roof of Steinmetz Hall in beautiful red, green, and yellow.







TELEVISION

HOUSE OF MAGIC

MAGIC KITCHEN



stands in front of the television camera

and sees himself as others see him-

by television. Across the hall are

television sets which receive the pro-

The transmitting studio is glass-

microphone, and control panel. In this

studio interviews are conducted and

fascinating demonstrations are made.

Outside programs from New York City

are picked up to demonstrate the type

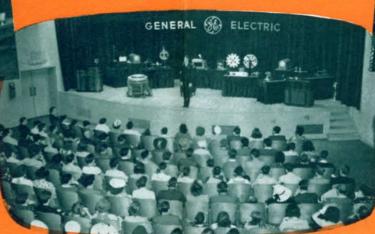
of television service available today.

enclosed, fully revealing the latest television equipment; camera, lights,

gram being televised in the studio.

Inside the tube appears bluish haze. Suddenly golden globules of light swirl upward. The explanation: rising bubble of sodium vapor produce a golden glow within the electrically charged tube.

The late Floyd Gibbons found the General Electric Research Laboratory so amazing that he called it the "House of Magic," although that name hardly describes the long and painstaking research carried on there. The "House of Magic" at the World's Fair is a stage presentation which reveals many of the mystifying phenomena discovered in the General Electric Research Laboratory, Pictured here are a few of them.



sound; hearing light; operating a toy train by voice control; popping corn by

radio waves; witnessing the "black" light

of ultra-violet lamps, which reveals a

beautiful world of color invisible in

ordinary light—are presented as examples of General Electric research efforts to

provide "More Goods for More People

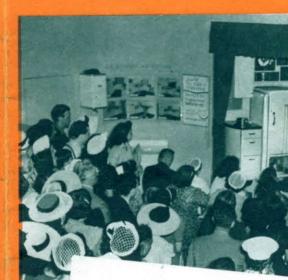
Floating an object freely in the air is accomplished by G-E scientists with this levitator. A neavy aluminum bowl spins, ocks back and forth, or floats stationary in the air, all at the will of the operator.



This man's shadow refuses to follow him, yet it shakes hands with him, and then permits him to roll it up and put it into a box. The secret lies in the fact that the shadow is produced on a phosphorescent screen which glows after the light has been removed.



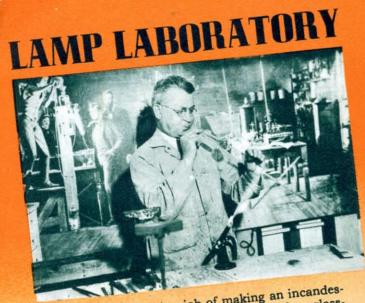
Light now runs an electric motor. By means of photo-voltaic cells light is transformed directly into electricity, which runs the motor. In the world of tomorrow, sunlight may be applied directly to the task of providing electricity to serve our needs.



TN THE Magic Kitchen electric appliances take on amazing animation as they open their doors, operate auto-matically, and talk about themselves. An old-fashioned kitchen and a modern all-electric kitchen argue their own virtues in a breezy, humorous dialogue, and the old appliances are finally pushed off the stage by the new ones.

THE "PHANTOM" HOUSE

This fast-moving and amusing dramatization portrays the story of Mr. and Mrs. Tom Morrow, newlyweds, and what happens when Mr. Morrow's mother-in-law comes to visit them. The action takes place within a glass house, giving visitors the opportunity to see and listen-in on this domestic triangle, and learn how the newlyweds solve the problem raised by the mother-in-law's insistence that she stay with them.



THE painstaking job of making an incandescent lamp by hand is demonstrated by a glassblower who makes replicas of Thomas A. Edison's first practical lamp. The glassblower starts with the glass tube, blows the bulb for the lamp, inserts the filament, and carries out each of the steps to the final lighting of the lamp.

The feeble light of this lamp, which was a brilliant new source of illumination 60 years ago, is contrasted with the efficient lamps of today, ranging in size from the world's largest incandescent lamp of 50,000 watts down to the world's tiniest lamp. The latest special-purpose lamps such as fluorescent, sodium vapor, and sunlamps—are also demonstrated.



ROCKWELL KENT MURAL

THE famous Rockwell Kent mural, painted especially for the General Electric World's Fair Building, symbolizes the influence of electricity in providing comforts, conveniences, and higher living standards for the American people.

At the left the mural depicts the superstitions and misbeliefs of the Dark Ages-the alchemists, astrologers, philosophers, and witches. Then, with the coming of electricity (symbolized by two heroic figures), progress and enlightenment come to the world. Under the influence of its liberating power the toilers of the world are shown discarding their outmoded tools and marching on to the more abundant life, represented by the city of the future.

For almost 62 years General Electric, by constantly making electricity more useful—developing new products, improving them, and reducing their cost-has made the comforts and conveniences of electricity available to more

and more millions of people each year. The General Electric research laboratory was founded in 1900; each year since then it has developed new knowledge which has been put to work to bring untold benefits to the world. From this laboratory came the ductile tungsten filament and gasfilling-most important steps in improving the lamp. Here was developed the Coolidge X-Ray tube, used by physicians to fight disease, and by industrial workers to inspect manufactured products. From here came the high-vacuum power tube, which made possible radio broadcasting and the great industry which developed from it.

General Electric scientists, engineers, and skilled workmen are today, even more than ever before, directing their efforts to the production of More Goods for More People at Less Cost, so that all may enjoy the comforts that electricity has made possible.



THE well-preserved skeleton of Harwa, a 2800-year-old Egyptian mummy, is revealed by X-Ray fluoroscopy in the exhibit of the General Electric X-Ray Corporation. The skeleton is shown on a fluoroscopic screen of the kind used to examine bone fractures but large enough

to show an entire adult-sized body at one time. The use of the X-Ray by physicians, saving lives and relieving distress hundreds of times each day is also demonstrated. A series of radiographs demonstrate its medical applications in studying the human body, while the commercial use of X-Ray—examining foods, materials, and other products for defects and foreign materials—

GENERAL ELECTRIC PRODUCTS FOR THE HOME



Refrigerator

Since the first General Electric refrigerator was introduced in 1927, the cost of this household necessity has been cut in half, while the quality has been vastly improved.



With the development of the high-vacuum tube by General Electric in 1919, modern radio became possible. General Electric radio receivers are marvels of tone and performance.



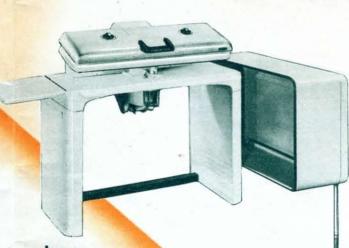
GENERAL ELECTRIC

PRESENTS

"MRS. CINDERELLA"

Cinderella's troubles after she married the Prince and settled down to live in the old castle are entertainingly dramatized by the Tatterman Marionettes. A horde of impish gnomes make Cinderella's housework about the castle a tough job until she is rescued again by the Good Fairy, who brings electricity into the castle.

IT'S EASY TO STAY YOUNG ELECTRICALLY



The G-E flatplate ironer provides still another method of making electricity do the hard work of homemaking.



Electric Range

Electric Sink

and washing dishes electrically, the elec-tric sink is among the

newer products developed for the home.

Even with the vast improvements made in the electric range, the cost has been steadily reduced year by year.



The efficiency of the lamp bulb has been so greatly increased, and prices have been so greatly reduced since 1900, that last year the public saved 2 million dollars each working day on its lamps and 10 million dollars each working day on its electric light bill by this one General Electric research and engineering accomplishment.



Smaller Appliances

Day by day in millions of American homes these smaller appliances are helping to relieve the dreaded duties of housekeeping. They are helping millions of American housewives to stay young electrically.





Providing relief from washday drudgery in millions of American homes, the electric washer symbolizes the comfort and convenience which electricity has brought.