



# MIRACLES of SCIENCE

*future and sees a golden age which will astonish even the most imaginative dreamers*

the sun's rays will make solar heating, lighting, and power a reality. Solar energy in some regions may be cheaper and more practical than nuclear power!

Some day, too, the need for power wires and such common household items as cords and plugs may have vanished. There is a technical possibility that power can be transmitted directly on invisible beams—and that an airplane, for instance, can be controlled and powered by transmission of a radio and energy signal.

## Business and Industry

Automation, electronic equipment, and other machines will make it possible to increase production per worker, creating more leisure time and a constantly rising living standard. (Atomic processing plants, oil refineries, and others now can be operated in large part from a control panel.)

Many firms now are drowning in an ever-rising sea of paper work; so is government. Electronic computers will take over vast recording and accounting jobs, freeing tens of thousands of clerical personnel for other responsibilities. The need for expensive models of many new products, from jets to smaller items, will be eliminated: computers can predict their performance under varying conditions in a few hours.

You'll be able to dictate memos and personal letters directly into an electronic typewriter. Already, a rudimentary phonetic typewriter can type a few simple words and phrases as they are spoken into a microphone.

## Health

Man's life span will have increased to nearly 100 years. The causes of and cure for cancer will have been found. We will know how to deal with most types of heart disease. The ability to "transplant" certain organs and tissues, new cures for many

mental ailments, mastery of crippling arthritis and even most types of headaches and colds—all will be part of medicine's achievements.

The atom and electron will be your doctor's servants. Electronic "brains," for instance, will store knowledge of every symptom of every disease, making instantly available to physicians everywhere up-to-the-minute scientific findings which they could never hope to keep abreast of.

## Food Resources

New discoveries will make the waters of wretchedness recede from every corner of civilization. Our limitless oceans will be "farmed" for nutritive products. Refining of salt water into fresh will be widespread and inexpensive. Striking developments in irrigation and flood control, more efficient use of solar energy, electronic acceleration of germination and growth, and revolutionary chemical and biological discoveries will expand mankind's food resources so that famine will be eliminated—despite immense population increases.

## Home

There will be almost no housekeeping problems. Temperature, humidity, and velocity of air in each part of the home will be kept automatically at comfortable levels, day and night. Smoke, dust, and harmful bacteria will be purged from the air before it enters. The reversible heat pump, based on the principle of a refrigeration unit, will cool homes in summer and heat them in winter.

Electronic appliances will do your cooking, dish-washing, and disposal of waste. High-frequency sound waves will clean the dishes. An electronic oven will cook meat in two or three minutes. All appliances can be turned off from miles away by dialing code numbers on your pocket-size radio-

phone—and, thanks to an electronic housekeeping "center," you'll enjoy such luxuries as having breakfast ready the moment you get up.

Blankets no longer will be necessary indoors; a radiant "canopy" over your bed will replace them. Instead of a picture window, there will be an invisible "curtain" of moving air to divide your living room and patio. A home TV circuit will enable you to look into nurseries or other rooms at the opposite end of the house.

New dirt- and grease-resistant floor, furniture, and wall coverings will be available. There even will be a bug-killing paint which, year in and year out, will kill any insects that touch it.

## Climate

Thanks to data furnished by satellites, as well as the electronic analysis of land, atmosphere, and oceans, climate control will be within man's reach. We will know how to dissipate storms of hurricane intensity or divert them from their destructive course. We will unfreeze ports which are now ice-bound. We will be able to predict weather precisely for months and years ahead.

*This is not science fiction. These elements of a golden age are definitely within our reach.*

*Some things, however, science cannot do. It cannot, for example, determine how its gifts are to be utilized.*

*It cannot overcome blind fears or small thoughts which impede progress.*

*Nor can science make nations live together in a spirit of justice, humility, and peace.*

*This, all men together must learn to do. Or science—with all its miracles—will be meaningless.*