

Goldmark, Peter Carl 1969 feb

14 Wonderful Inventions that Won't Save the World — *and* *2 that might*

BY DR. PETER GOLDMARK



If you could dream up a dozen or so inventions that would make life more enjoyable — nay, even 'save the world' — what would they be?"

As a scientist and inventor — not such a rare breed in this modern era, which has cradled more than half the scientists who have lived on earth since the dawn of history — it is unusual for me to get through a dinner conversation without some one popping that question.

Of course, no scientist has to dream up crazy inventions anymore. Our civilization is giddy with gadgets already. By the year 2000, more than 5,000,000 patents will have been issued by the U.S. Patent Office, covering the average man's every conceivable — and inconceivable — need as thoroughly as the concrete of shopping-center civilization is gradually covering every blade of grass in what was America.

But that dinner-party question still persists: what are the inventions that can make life even more worth living? Technologically speaking, we do stand on the threshold of marvels even more dazzling than those we've seen. Here are a handful of those new blessings which many scientists believe are just over tomorrow's horizon:

- By the year 2000, experts predict that many Americans will be flying around in aerodynamic autos powered by fuel cells, batteries or atoms.
- Micro-electronics will produce an electron beam — a super liquid that can crumble a mountain of granite in a few minutes.
- Miniaturization will enable the businessman of the future to carry equipment in his briefcase which today fills an entire room: video camera, electric typewriter, computer (TO PAGE 19)

◆ Hungarian-born, 62-year-old Dr. Peter Carl Goldmark has won many honors as an inventor. During World War II he developed electronic reconnaissance devices for field use and, in 1954, he was awarded the Television Broadcasters Association Medal for his work in developing color television. He also invented the long-playing 33 $\frac{1}{3}$ r.p.m. phonograph record and spearheaded the development of Electronic Video Recording (EVR) for playing back movies, taped programs, and education courses over a standard television set. He is now president and director of research for C.B.S. Laboratories, from which he also directs work on space projects and secret military research for the United States government.

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THIS WEEK

For a Better America

• William J. Woestendiek, Editor

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THIS WEEK'S WORDS TO LIVE BY: "Perfection falls not to the share of mortals." — GEORGE WASHINGTON

14 Wonderful Inventions

(FROM PAGE 2) terminal, picture-phone and tiny TV screen.

- Bio-engineers say that by the manipulation of DNA, the chemical substance important in genetics, they will be able to "engineer" physical and emotional makeup before birth.

- Climate-controlled cities will be covered by domes two miles in diameter.

- The endoscopic camera, embodying revolutionary principles of fibre optics, already permits light to bend around corners, twisting and turning through the abdominal cavity, photographing areas of the body never seen before without an operation. Imagine for yourself what fantastic medical and surgical advances this can lead to.

- Knowledge and memory pills will be administered to make people instantly conversant with any subject.

- Electric generators capable of supplying entire continents with power will be driven by the steady four-to-six-knot current of the Gulf Stream.

- We will travel from Chicago to Tokyo in ½ hour.

- Undersea ranches will be operated by men able to breathe like fish, thanks to an artificial plastic gill attached to their lungs.

- Icebergs will be floated to the shores of arid nations as a source of fresh water.

- Micro-optics, which can reduce books to infinitesimal squares of micro-film, will be able to condense the 15,000,000 volumes in the labyrinthian Library of Congress into six small filing cabinets.

- A laser directed from the ceiling towards a dinner plate will broil our steak.

- Pinhead-sized microcircuit radios (stereo, of course) will be planted in our ears.

These are some of the wonders predicted for our future. Will they, singly or in combination, increase man's happiness and peace of mind by one iota?

I am an inventor and I say no.

I say we already have inventions enough — now we must catch up with the inventions we already have. Our bathrooms are more luxurious than those of ancient Rome. We jet round the world faster than Caesar could march from Pompeii to Rome. But have our basic instincts and thinking processes improved?

If we could have push-buttoned our way to happiness, we would already have reached nirvana. I agree with Lord Ritchie-Calder, former pro-



fessor of International Relations at the University of Edinburgh, in his nutshell summation:

"The great tragedy of science today is that we've got a great stockpile of knowledge and no philosophy."

In the humble opinion of this inventor, the only revolutionary finding that can possibly save man is the rediscovery and rededication of the simple dictates of his own heart. Its message must come through if we are to survive happily — that there's something more important than getting to Tokyo in a half hour, and that's looking out the window and enjoying the scenery along the way.

Let us begin with the basics. To change the world we must change ourselves. To change ourselves, we must change the way we deal with one another. Scientists have developed ways to communicate with astronauts circling the moon. What we need now is a better way to communicate, person-to-person, here on earth.

Perhaps I may be pardoned if I exercise my prerogative as a scientist to come up with two of my own candidates for "most-needed invention."

▪ The first is — *a new kind of parent*. I mean parents who, realizing that 50 per cent of their child's ability to learn takes place during the first four years of his life — when the child is directly under parental influence — take the time and trouble to instruct and shape the young life.

We need parents whose example does not fill sons and daughters with the attitude that money, flashier cars and bigger houses are the only goals of life; who, instead of abdicating their responsibilities, are not afraid to set moral standards — ranging from respecting the needs and rights of others, to sex, LSD and violence on TV — and insist on respect and compliance no matter how "corny" and unpopular their standards may appear.

▪ We need *a new art of education*, to pour into every growing child — in such a way that he enjoys it — the accumulated knowledge of a thousand years so that he can cope with the 20th Century's technological problems and thrive as a human being. In the past 100 years, world population has almost tripled and the amount of knowledge that we have been accumulating has jumped 100-fold; but our education techniques have not kept pace.

It is not hardware, gadgetry or beautiful labor-saving devices that will give man the peace of mind he craves. History, as H. G. Wells once said, is a race between education and destruction. The future is here. We'd better catch up with it.