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THE SURVEY

Civil Liberties in Germany—Arthur Garfield Hays

The Common Welfare
Alice V. Keliher and others

"On Appeal in the Supreme Court"
Ted Poston

$5 a year

January 1949

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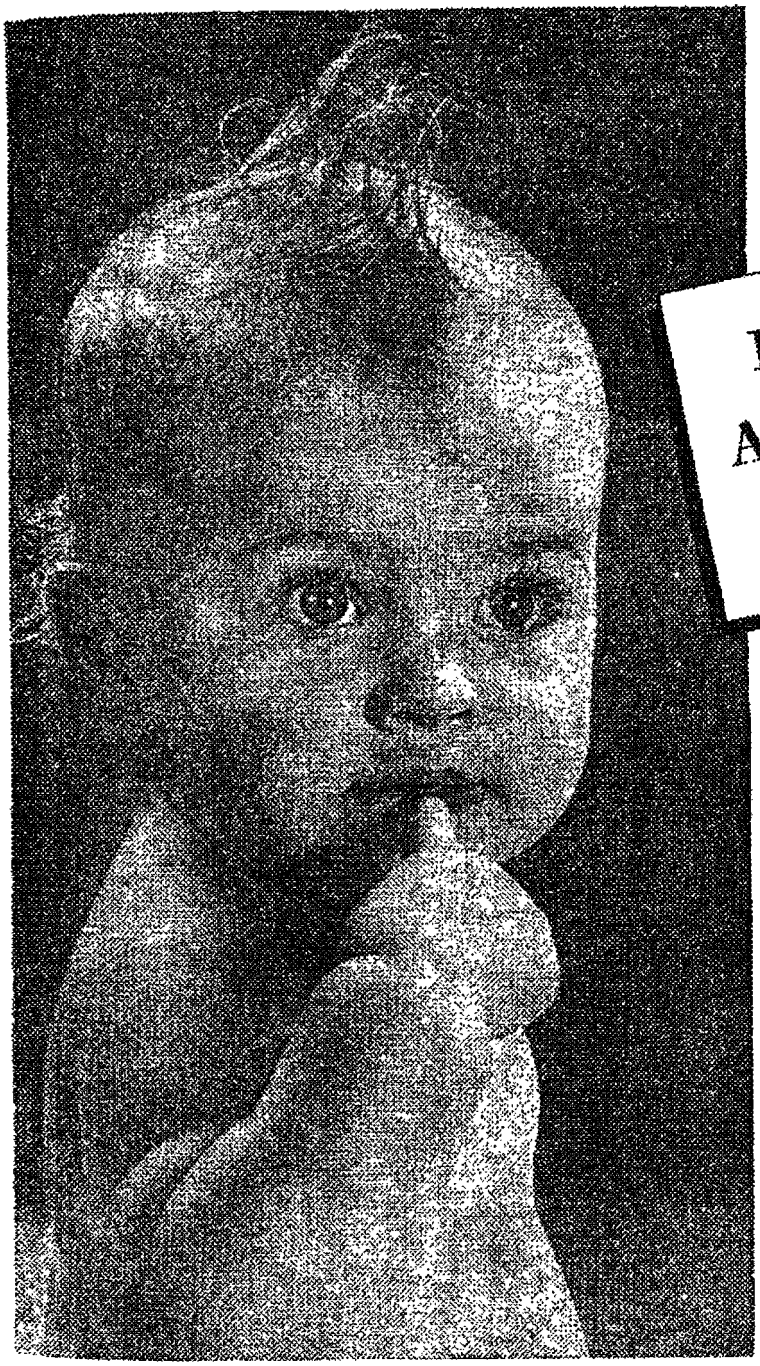
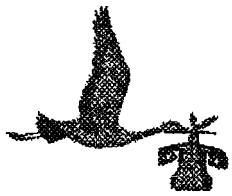


Have You Heard About the Telephone Birth Rate?



1948 was a mighty big year for additions to the telephone world.

Your own particular telephone is more valuable today, millions of calls go through clearer and quicker, because of the many things that have been done to extend and improve service.

You can call more people, and more can call you, because nearly 3,000,000 Bell telephones were added to the telephone population — many in your own community.

Long Distance is faster and there is more of it because 1,800,000 miles of new circuits were added. A total of $1,500,000,000 was invested in new Local and Long Distance facilities in 1948.

We broke all records for the volume of new telephone construction, the dollars we put into the job and the number of telephone people on the job.

We're going to keep right on working and building in 1949 to make your telephone service a bigger bargain than ever.

BELL TELEPHONE SYSTEM

Among Ourselves

The Survey's story traditional ship—see cover—is still exploring the seas of change. On course all these years as a guiding symbol, it was drawn by Robert Cairns Dobson for the cover of October 4, 1913, when the page was brought to its present size. It was, noted an editorial, "the caravel of Columbus," sailing into the waters of the New World.

Back in May 1932, *The Survey* carried a story by Katharine Schaub, then serenely waiting death from radium poisoning contracted as a painter of watch dials. This the editors called a "poignant argument for far greater safeguards for workers exposed to new chemicals and for compensation laws (covering) . . . not limited lists of diseases, but any disability directly due to occupational hazard." Today, seventeen years later, only sixteen states have such generalized laws though the need for them is daily more apparent. Evidence is provided in Marion Robinson's article on page 46 telling of the hazards to human health and life from mysterious cancer-inducing chemicals used in industrial production.

Long time *Survey* readers need no introduction to Miriam Van Waters, now under attack by Massachusetts politicians; nor to Gertrude Springer who comes to her defense on page 55 of this issue. One of the country's foremost penologists, Dr. Van Waters has been an intermittent contributor to *Survey* pages since May 1923 when we published as a special section her report on a national survey of penal institutions for women. In the late Twenties when she was referee in the Juvenile Court of Los Angeles she wrote a series of articles on parent-child relationships which later became parts of two successful books, "Youth in Conflict" and "Parents on Probation." In a later article about Edward Hickman, a convicted murderer awaiting hanging in a San Quentin prison, she gained widespread attention for her analysis of the ingredients of heredity and early neglect that combined to produce a vicious criminal.

Gertrude Springer is still known as "Miss Bailey" to the numerous public welfare workers who in the days of the great depression used her "Miss Bailey Says—" series of *Survey* articles and pamphlets as a bible for client understanding. Mrs. Springer, whose authorship has by no means been limited to the Miss Bailey series, was managing editor of *Survey Midmonthly* from 1930 to 1942. From her pleasant retirement in Cape Cod and Brookline, Mass., she occasionally sends us book reviews and other requested items.

In her present statement Mrs. Springer indicates that Dr. Van Waters' friends are ready to put up a fight to keep her in her present position. Indication that this will be something to be reckoned with is the recent formation of the Friends of the Framingham Reformatory, Larue Brown, chairman, 53 State Street, Boston. The committee, which at present consists of about 200 prominent Massachusetts citizens, is sending out some 10,000 letters to persons likely to be interested in supporting Dr. Van Waters, her methods and administration.

Richard L. Neuberger, one of the most appreciated contributors to *Survey Graphic* last year, was victoriously swept into office on the tide of November 2, being elected to the State Senate by the largest vote ever received by a legislative candidate in Oregon. Two years before, he was defeated for the same place, but still ran almost 9,000 votes ahead of any other Democratic candidate in Portland. In 1940 he was elected to the Oregon House of Representatives. Although by this time apparently confirmed in his political inclinations, Mr. Neuberger is not renouncing his career as a writer and is due to appear soon again in the pages of *The Survey*.

On page 59 Janet Sabloff of the *Survey* staff makes the first entry in our "Traveler's Notebook" since the interruption of the war years. Hoping to continue this as a regular *Survey* feature the author welcomes any comment from prospective or armchair travelers as to the type of material they are interested in as well as stories of their own experiences "on the road."

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Cancer in the Factory

New industrial processes have sharply increased the danger of occupational cancer. Whose the responsibility for prevention and control?

MARION ROBINSON

IT WAS ONLY ON CIRCUMSTANTIAL EVIDENCE THAT CIVILIZATION was indicted for the crime of cancer.

Now comes conclusive evidence that cancer, in part at least, is today a disease of industrial civilization. Modern man is faced with a tremendous penalty in human suffering for what he achieved in his greatest pride, as though the wrathful God of our forefathers were bringing vengeance upon man for daring to take nature's secrets for his own.

The discovery that hundreds of materials used for industrial manufacture contain cancer-producing agents will mean, in the next few years, many changes and new responsibilities in our personal and institutional lives. Yet the very facts which uncover this new danger in modern living may possibly hold the secret of all cancer. The work that will be done to roll back the threat of this *environmental* cancer may turn up the clue to the disease from which nearly 190,000 people each year now die.

The first entry in the roll-call of agents unleashed by industrial processes was a mere commonplace. In 1775 a London physician, Percival Pott, writing of the curious incidence of scrotal cancer among chimney sweeps, suggested a connection between it and the accumulations of soot on the bodies of the unwashed urchins.

During the next hundred years, paraffin and shale oils, pitch and tar were added to the list of suspected causes—this time, of cancer of the skin—by way of medical writings in France, Germany, and the British Isles. In 1895 a medical researcher went to work on cancer of the bladder among workers in the German dye industries. He found the causative agent to be lurking in the aromatic amines—beta-naphthylamine and benzidine.

In the cobalt mines of Schneeberg, Germany, an occupational ailment called "mountain disease" has, for centuries, killed three out of four miners. In the early 1900's it was discovered that mountain disease was really lung cancer caused by exposure to radioactive ores. In 1926 a similar discovery was made about miners in the uranium-radium mines of Joachimsthal, Germany. About the same time, "radium disease" made its appearance among young women workers in the luminous dial plants of New Jersey and Connecticut. Thirty percent of them developed cancer of the bones, while a severe anemia overtook the others at an earlier stage before malignancy developed.

Reports from the chief inspector of factories in England in the past three decades establish a connection between hot tar fumes in the English gas works and the skin cancer which develops among workers. And in the past twenty years, research here and abroad has revealed that a number of other industrially useful substances belong in this array of death agents. Since 1924, creosote, benzol, chromates, nickel carbonyl, and asbestos have all been added to the list. The U. S. Public Health Service is publishing, in connection with a health report, a chart of twenty-seven agents which attack fifty-two kinds of body tissue. Although nineteen of these correlations are still filed under "Suspected," thirty-three are marked "E" for "Established."

THE STORY OF ENVIRONMENTAL CANCER IS LITTLE KNOWN. Only a small fraction of the thousands of cancer researchers and clinicians have given it attention. Research has gone along quietly, gathering momentum in the last twenty years as evidence began to mount. Today it is a modest but brand new landmark in the long uphill struggle against cancer. And it is crucial for this country, since its cause and effect are rooted at the heart of industrial production.

Take Plant X, one of our country's great dye manufacturing industries, situated in a county which has a population of 100,000. Plant X employs 1,000 people, ten of whom work deep in the heart of the factory, where dust and vapor by tons are given off into the atmosphere. Two of the employes, Bob and Mike, have worked in the unit for fifteen and twenty years respectively. The rest of the crew have been there six years or less. Mike has been suffering pain and discomfort for some time, and he goes to see a doctor. The diagnosis is cancer of the bladder. It can be treated but as is often the case with cancer, by the time the symptoms show up, the disease is well advanced.

Informed by Mike's physician that the cancer may be

—By a recent staff member of Survey Associates who this month goes off on her own as a free lance writer. A graduate of the New York School of Social Work, with experience both in casework and in social work interpretation in Baltimore and New York, Miss Robinson came to Survey Associates three years ago to carry a major portion of the responsibility for the Survey Midmonthly. *To this task she brought a combination of technical knowledge in the social work field and a gift for lively expression. Though her name has disappeared from* The Survey *masthead, it will, we hope, continue to appear in the table of contents.*

connected with materials used in the plant, the plant physician examines the rest of the men on the crew. Bob is found to be suffering from the early stages of the same disease. None of the other men show serious symptoms.

Mike's illness drags on for months. It is proved that his cancer was caused by taking aromatic amines into his system through twenty years exposure to the dust and vapors, but he is not eligible for compensation. New state compensation laws are written so that a new occupation-connected illness like this can be recognized unless specifically written into the law. The company makes a private settlement to care for Mike during his illness, and for his dependents afterward.

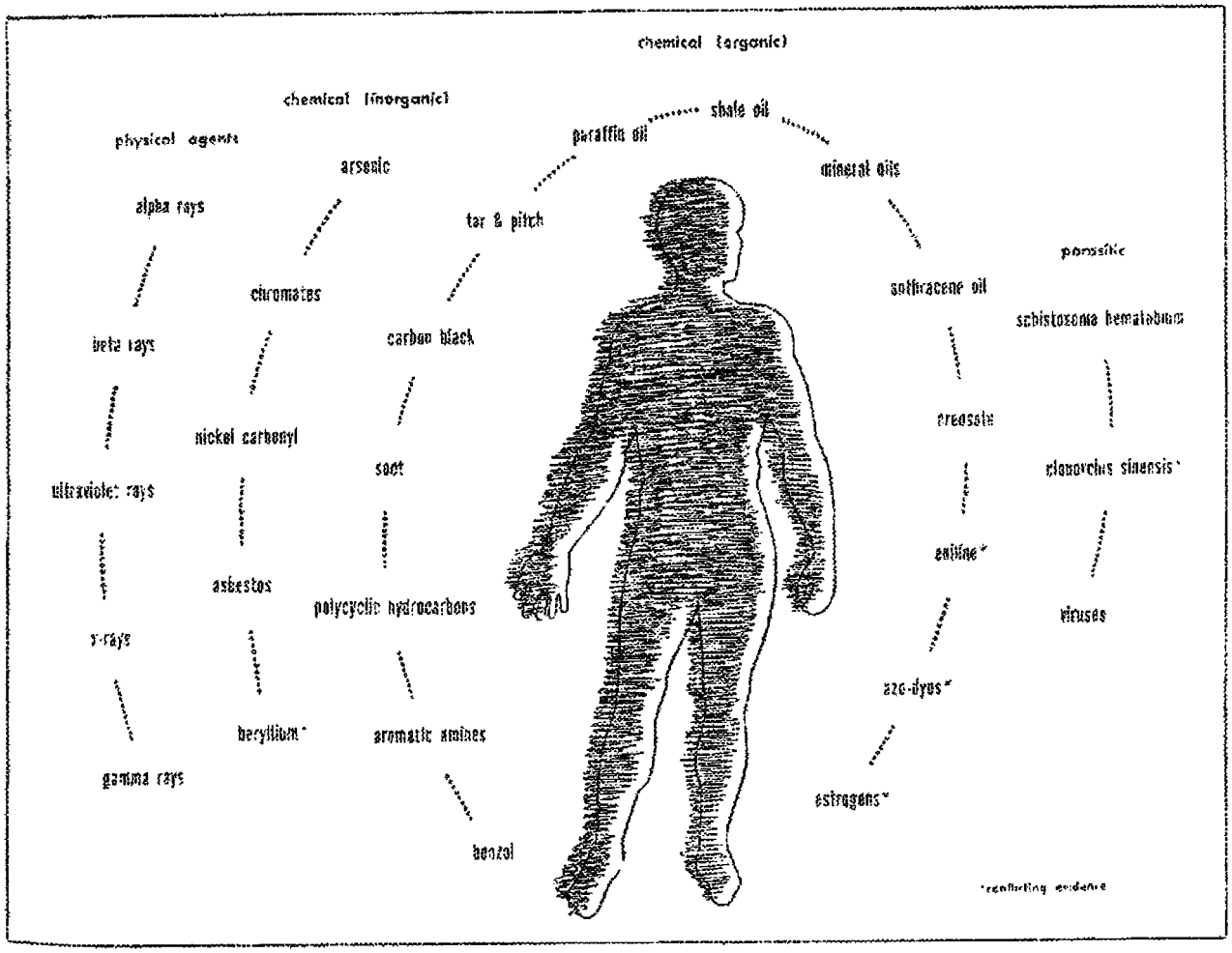
If Plant X disregards Mike's tragedy and fails to find a way to protect its workers, the experts predict nine out of ten of the men needed in this unit of operation will, after a certain period of exposure, develop cancer—and all in the bladder.

If the plant mistakenly puts its total effort into protection of the two men in this most exposed spot, without taking account of the possible danger to others in the plant at large and in the surrounding community, it may save the nine or ten in the vat rooms, but will still have to reckon with the probability of cancer developing in forty or fifty other members of the plant population and in a hundred others out in the county.

Geology and climate were for the ages before our present one, the two main factors in our environment that could exert much effect on man. But environment has now grown enormously complicated by a myriad of chemical and physical agents released by the increase of chemical and metallurgical establishments and the introduction of air pressure tools. It comes as a shock to realize that danger lurks in the materials used for power production, transportation, communication, lighting, heating—in short, almost all the trappings of modern life which we have considered as contributing to our safety, comfort, and convenience.

MOST OF WHAT IS KNOWN ABOUT ENVIRONMENTAL CANcer has been learned in the past twenty years. This may have been because the very nature of its origin delayed its most dramatic appearance until the industrial age was well advanced. Those who know medical history point out, however, that the first clues appeared seventy-five years ago almost simultaneously with Pasteur's discovery of bacteria and other animate disease-producing agents.

The ensuing battle against infectious disease absorbed the medical world and, except for scattered research in various countries, the clues were not followed up until the early 1920's.



A chart of the major known occupational cancer-producing agents, from "Environmental Cancer", by Dr. W. C. Hueper, National Cancer Institute, Federal Security Agency, U.S. Public Health Service. Copies from Supt. of Documents, U. S. Government Printing Office, Washington 25, D. C. Price 20 cents

Cancer in the factory

One of the handful of medical men who began work on the problem at that time was Dr. W. C. Hueper, then a recent graduate of the University of Kiel, and assistant physician in a municipal hospital in Berlin. Becoming interested in the high incidence of lung cancer among these Berlin patients, he began research which brought him to the department of pathology at Chicago's Mercy Hospital in 1923, and on to a four-year stay in the cancer research laboratories of the University of Pennsylvania medical school. It was here that he made further progress in the study of bladder cancer among workers in dye industries, which is probably the earliest work in this country on this occupational cancer.

Today, after another fourteen years of research in the DuPont Industries and the William L. Warner Company, he presides over the environmental cancer section of the U. S. Public Health Service's National Cancer Institute. Currently, this section consists of eight researchers working alternately in a modest laboratory at Georgetown and a busy office in a rambling temporary building overlooking beautiful countryside at Bethesda, Maryland.

A soft-spoken, gently humorous man of middle age, Dr. Hueper has two ambitions: to reach every worker employed in the last twenty years in "exposed" operations of industries using materials known to contain cancer agents; and to help this country mobilize itself to roll back the threat of environmental cancer before it gains any more headway. As chief of this section of the institute's cancer control branch, which was set up last May to "investigate into extrinsic causative factors of human cancer," he faces one of the most significant and crucial public health jobs this country has known to date.

INDUSTRY ITSELF HAS INITIATED AN ATTACK ON OCCUPATIONAL cancer which is being carried out in Memorial Hospital's Sloan-Kettering Institute, in New York City. Headed up by Dr. William Smith, a Johns Hopkins medical school man who has worked at cancer research for ten years, these laboratories service some of our largest chemical industries. New materials are tested for carcinogenic agents before they are put into production. And with the help of an advisory committee which includes engineers and industrialists, practical methods for controlling these lethal agents are worked out.

Both of these experts agree that occupational cancer is by far the most significant part of environmental cancer. Though it accounts for a small percent of cancer cases in the total population—industrially-caused bladder cancer, for instance, represents only 0.2 percent of all bladder cancer in the country—it is on the increase. Further, it is estimated that fully 90 percent of the known environmental carcinogens never existed in dangerous concentration until industrial processes brought workers into close and constant contact with them.

The U. S. has not yet fully acknowledged, medically or legally, this risk to industrial workers. In other countries, there is legal recognition of a half dozen industrially-used substances as producers of skin cancer, radioactive materials and chromates causing lung cancer, of aromatic amines causing bladder cancer. Largely because of the lack of published scientific data, the majority of industrial management here is uninformed of the existence of the threat. Some skepticism remains in the minds of cautious researchers about certain suspected materials, and there is also a naturally retarding factor for industry in the prospect of undesirable publicity, costly rebuilding, extensive precautionary measures, and much more stringent government regulations.

Experience on the Sloan-Kettering project has shown that in some cases, plants are able to narrow down the use of dangerous materials to a few plant units. Sometimes workers can then be protected by as simple a device as wearing gloves, or by installing a ventilating system over storage bins where chemicals are kept. In other cases, the necessary changes in plant production run into real money. Dr. Smith tells of one company which, upon receipt of his laboratory's report went to work on a blueprint for plant reconstruction that eventually cost a million and a half dollars.

DR. HUEPER SEES THE PREVENTION AND CONTROL PROBLEM as one of sanitation. "Good housekeeping," he says, can accomplish a good deal. This includes taking care that cancer-causing materials are not carelessly exposed, enclosing pipes to do away with crevices and to provide a flat wall surface that can be hosed down regularly and easily. Besides providing masks, gloves, and respirators for workers, certain types of plants can diminish danger by heightening smoke stacks, and using electric plants which arrest the cancer agents from fume and smoke so that they can be washed away. Other kinds of plants can handle the problem by instituting a closed type of manufacture, that is, a system whereby workers will not need to come in contact with raw materials from the first to the final operation.

The plant physician emerges as an important figure in industry's struggle to protect its workers against these lethal agents. If he is able to detect and treat cancerous and pre-cancerous lesions, he can arrest the danger before it grows to unmanageable proportions. Dr. Hueper tells of a recent incident when a plant physician reported three cases of cancer of the nasal sinus—a rare affliction. Further study showed six cases of the malady in the same operation of the plant, with exposure of from six to twelve years to a suspected carcinogenic agent. Though the specific factor has not yet been nailed down, this doctor has undoubtedly saved many future employes from unnecessary painful and lingering deaths.

The plant physician also shares with management the responsibility for steering an employe who shows any symptoms of cancer into another and unexposed part of the plant. To have reassigned Bob to the same unit of work in Plant X after diagnosis would be, as Dr. Hueper puts it, "signing his death certificate, except for the date."

Labor also has a special job to perform in this prevention and control program. Considering the general dread of cancer in our generation, workers strangely resist using protective devices such as gloves and masks. Doctors complain, too, that workers fail to follow medical advice, and avoid the regular examinations which are considered necessary during a short period of exposure to a carcinogenic agent. The job of educating workers to respect the dangers under which they work thus becomes an important item on organized labor's agenda.

The legislative implications are many. Medical experts

agree that cancer should be a reportable disease, with responsibility vested in the state health departments as in the case of communicable diseases. Compensation laws must be amended to allow for occupational cancer. Although some states so phrase their laws that each carcinogenic agent would have to be named specifically, there are already so many—and new ones being discovered all the time—that some broad phraseology must finally be adopted. Some experts feel, too that there should be an addendum to the criminal code, making it a punishable offense to allow undue exposure of an individual to a known agent.

ALTHOUGH GREAT STRIDES HAVE BEEN TAKEN IN THIS FIELD IN the past twenty years, the growth of industry and the increase of occupational cancer demand more rapid progress in the new years. Here are some of the questions that must be answered:

How widespread is this affliction? There are no reliable data in this country concerning the number of occupational cancers. To date some 8,000 cases have been observed in workers of many industries, affecting many different bodily organs. The actual number, according to Dr. Hueper, is probably appreciably higher than what is recorded.

How long and how intense an exposure to these agents will produce cancer in humans? What is the length of the latent period before symptoms appear? These are two of the toughest nuts to crack. As in the cases of Mike and Bob, it has been found that manifestations may appear from ten to fifteen years after the period of exposure. If industries are not alert to the dangers for their employes, and cancer remains an unreportable disease, the turnover of plant workers scatters clues to the four winds. A start on this gigantic detective job is being made at the National Cancer Institute, under Dr. Hueper's direction. It is hoped that this project will not only help save the lives of these employes, but will also provide valuable information on the relation between the exposure period and the length of time before symptoms appear.

The $64 question here, as in all cancer research, is: *Just what happens when the agent comes in contact with human tissue? Does it have a direct effect, or does it in some curious way, cause the tissue itself to become endowed with carcinogenic properties? Or, as one theory has it, does it cause functional change in an endocrine gland or the liver which then generates the deadly product? In other words, what causes cancer?* These are the questions that have stumped the experts in hundreds of laboratories and clinics the world over.

The discoveries in the field of environmental cancer bring a new, slim ray of hope into the whole picture. There is just a chance that this new field of inquiry may hold the answer to the ancient problem. Suggest that to one of these canny medical men and he will shake his head doubtfully, but there is a gleam of excitement in his eye. The cause of 90 percent of cancer has hitherto been unknown. It may be that this will turn out to be a tiny fraction in the first wedge of knowledge to penetrate the innermost mystery of cancer.

MAN HAS ALREADY PAID PART OF HIS PENALTY FOR WHAT we call progress. He must begin now to pay in the coin of responsibility. Having exploited the environment for the sake of the good life, he must now come to terms with it for the sake of a better life.

McGuffey to the Contrary

"THE Jesuit Fathers were often very wise: at their school at La Flèche, young René Descartes was permitted, because of his delicate health, to remain in bed each day until noon. What McGuffey would have prophesied about the future of such a child is not difficult to imagine. But Descartes did not turn out a complete profligate. Indeed, his delightful habit of staying in bed until noon bore at least one remarkable fruit. Analytical geometry came to him one morning as he lay pleasantly in bed."—*Reprinted from "Mathematics and the Imagination," by permission of Simon and Schuster, Publishers. Copyright 1940 by Edward Kasner and James Newman.*