This Land of Ours



PUBLIC AFFAIRS
PICTURE PAMPHLET

30¢

Pam
2000.903

Some people have challenged the need to increase productivity of our resources; pointing to crop surpluses and huge expenditures for farm supports today, and saying, 'why increase the yield?' This kind of thinking is fallacious and dangerous. Conservation mèans wiser *use, not increased surpluses. Much land now in crops should be taken out of cropping, to save the land itself. . . .*

from the Annual Report of
the Conservation Foundation,
February, 1950.

Copyright, 1950, by the Public Affairs Committee, Incorporated
—A nonprofit educational organization—

Public Affairs
Pamphlet No. 162

This Land of Ours

Text by
MAXWELL S. STEWART

Designed by
MABEL C. MOUNT

PUBLIC AFFAIRS COMMITTEE, Inc.
22 East 38th Street, New York 16, N. Y.

MAY, 1950



Cities are monuments . . . to man's efficiency.

WHEN YOU LOOK DOWN from an airplane at a great city, you see a miracle of engineering and a community of human beings which has changed the face of nature.

Yes, cities are communities. So are forests, farms and ponds. Each one is a living society dependent for life and health upon air, sunlight, rainfall, food—the raw materials of nature.

But there is one difference: in a city, man, by his engineering skill, has vastly altered his environment. And he sometimes forgets his dependence on those other communities far away which support their own life and also his. He takes their contribution for granted.

Few city dwellers have time to think about their dependence on nature.





". . . eggs, butter, oranges, lettuce, bacon . . . Anything else?"

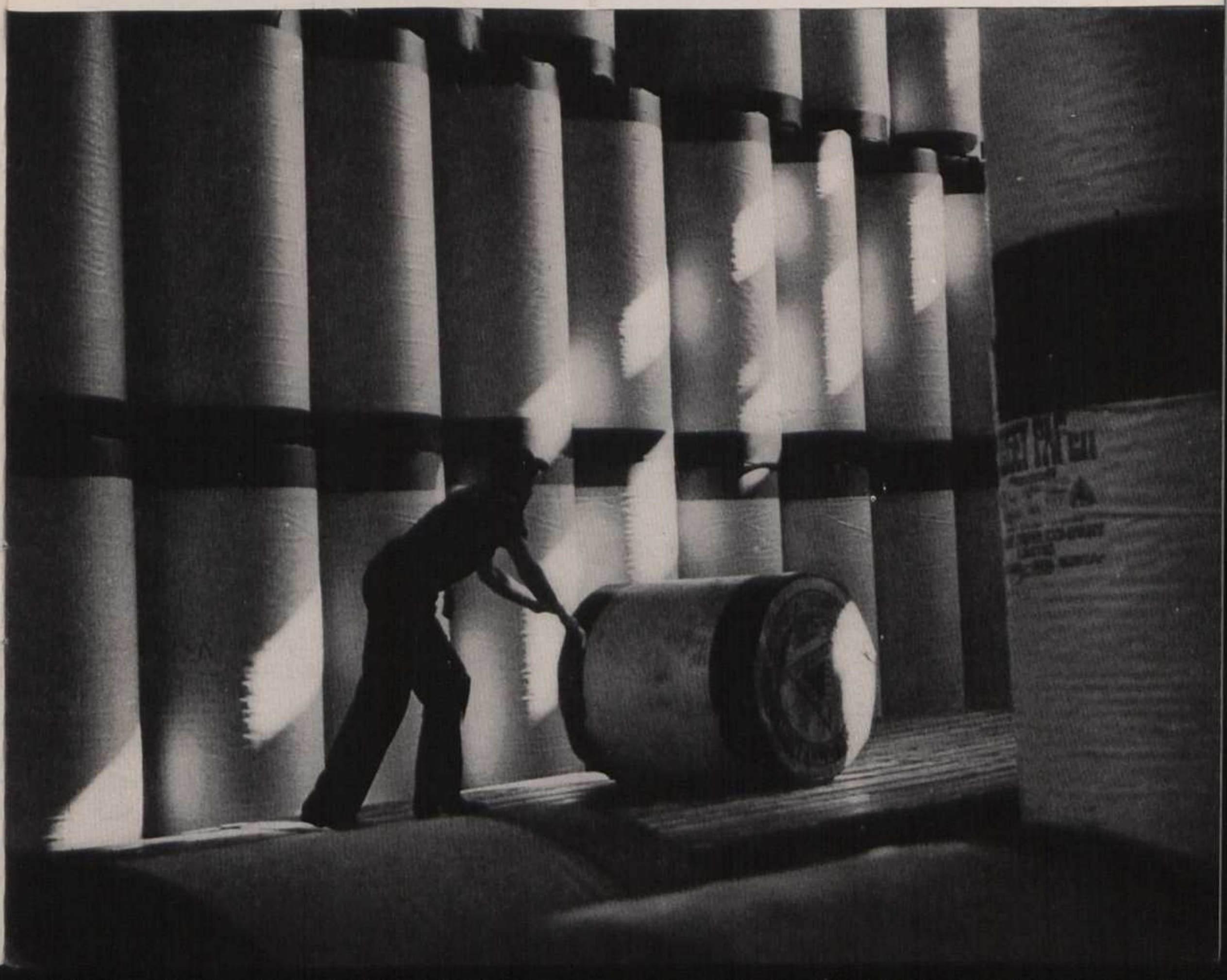
SIX AMERICANS OUT OF TEN live in cities. They turn a faucet . . . and expect water. Adjust their heat with a flick of the finger. The mere raising of a phone produces their food. Wonderful? Sure! But . . . .

Man, with all his scientific knowledge cannot create an egg, an orange . . . a quart of milk.

He can increase production. Overcome the vast difficulties of distribution. He can alter his environment—for better or worse. He can write disturbing words on paper. But he still can't create the tree that is the source of paper.

America has plenty of clothes—food—and the many varieties of material goods that make life pleasant. But their *source* is nature. And with all our science we are still dependent on nature and our knowledge of it.

America has plenty of newsprint . . . but it doesn't grow in cities.





American farmers harvest abundance.

In the spring our rivers are clogged with pulpwood.



SCIENCE HAS AIDED the farmer in his harvest of record or near-record crops each year.

Science has helped fuel and mineral production to reach new peaks until it has seemed as if there were no limit to the riches nature could be persuaded to yield.

Science is constantly discovering new sources of raw materials.

Excellent . . .

But natural scientists ask:

1. Is civilized man consuming nature's basic resources too fast?
2. Is stepped-up production exhausting nature's productivity?



Even cotton must queue up for shipment.

There'll be no shortage of bacon today.

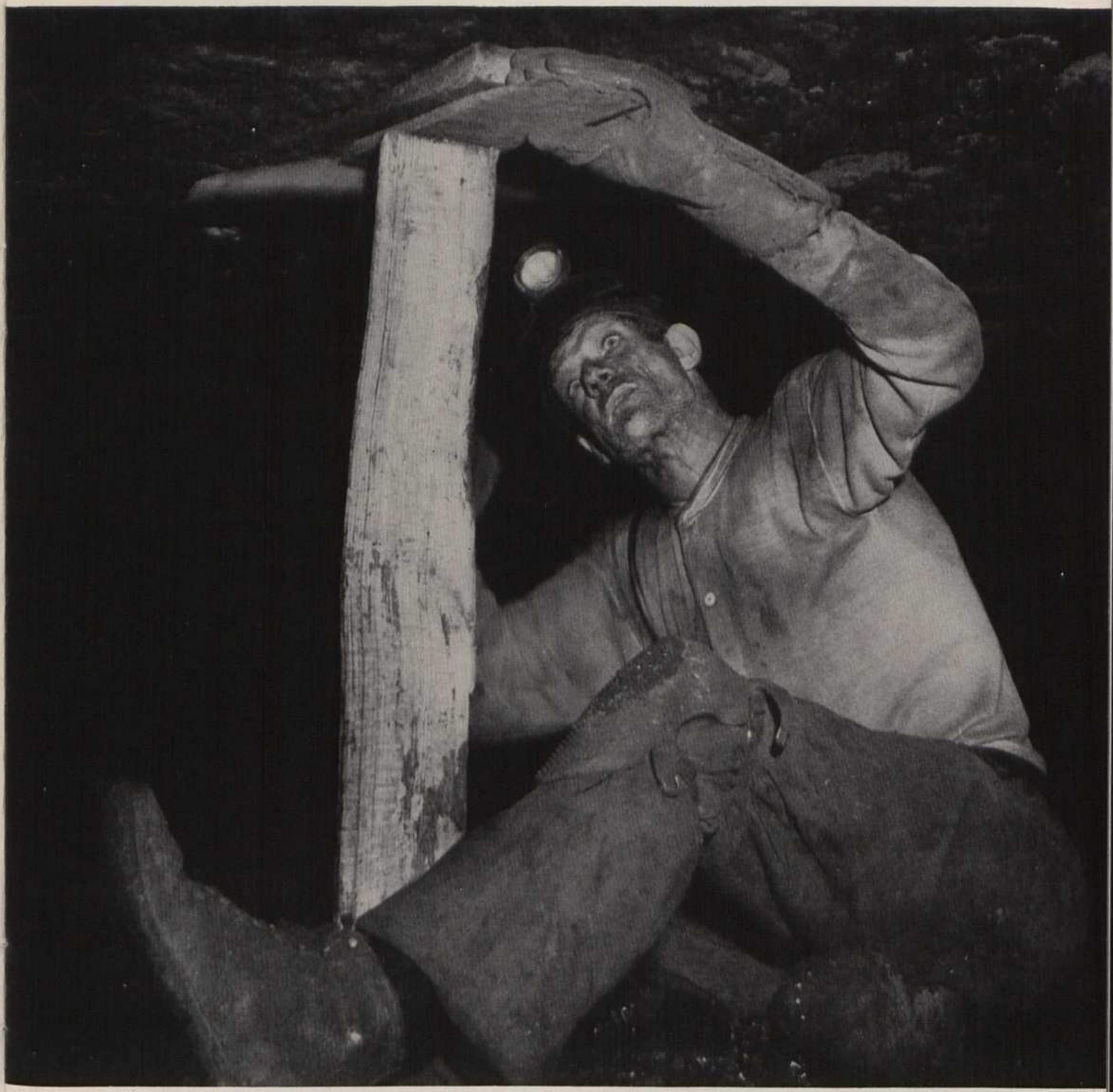




The steel industry alone is consuming 100,000,000 tons of coal a year.

BEFORE THE CIVIL WAR, horses, mules, and oxen did more than half of America's work. But with the development of steam power, coal became the chief source of energy. Then came the automobile, the tractor, and the Diesel engine. Today, coal, petroleum, and natural gas provide seven-eighths of the nation's work-energy. Vast quantities of minerals and metals are required each year to keep American industry going.

America is blessed with an abundance of coal, and at one time had a great deal of oil. Much of man's recent economic progress has been achieved through the relentless use of nature's minerals. But each year the coal that is mined lies a little deeper and costs a little more to bring to the surface. Fully a quarter of our anthracite is already gone.



And each year the available coal lies deeper below the surface.



Man desperately seeks oil wherever he can find it.

And in every way he can.



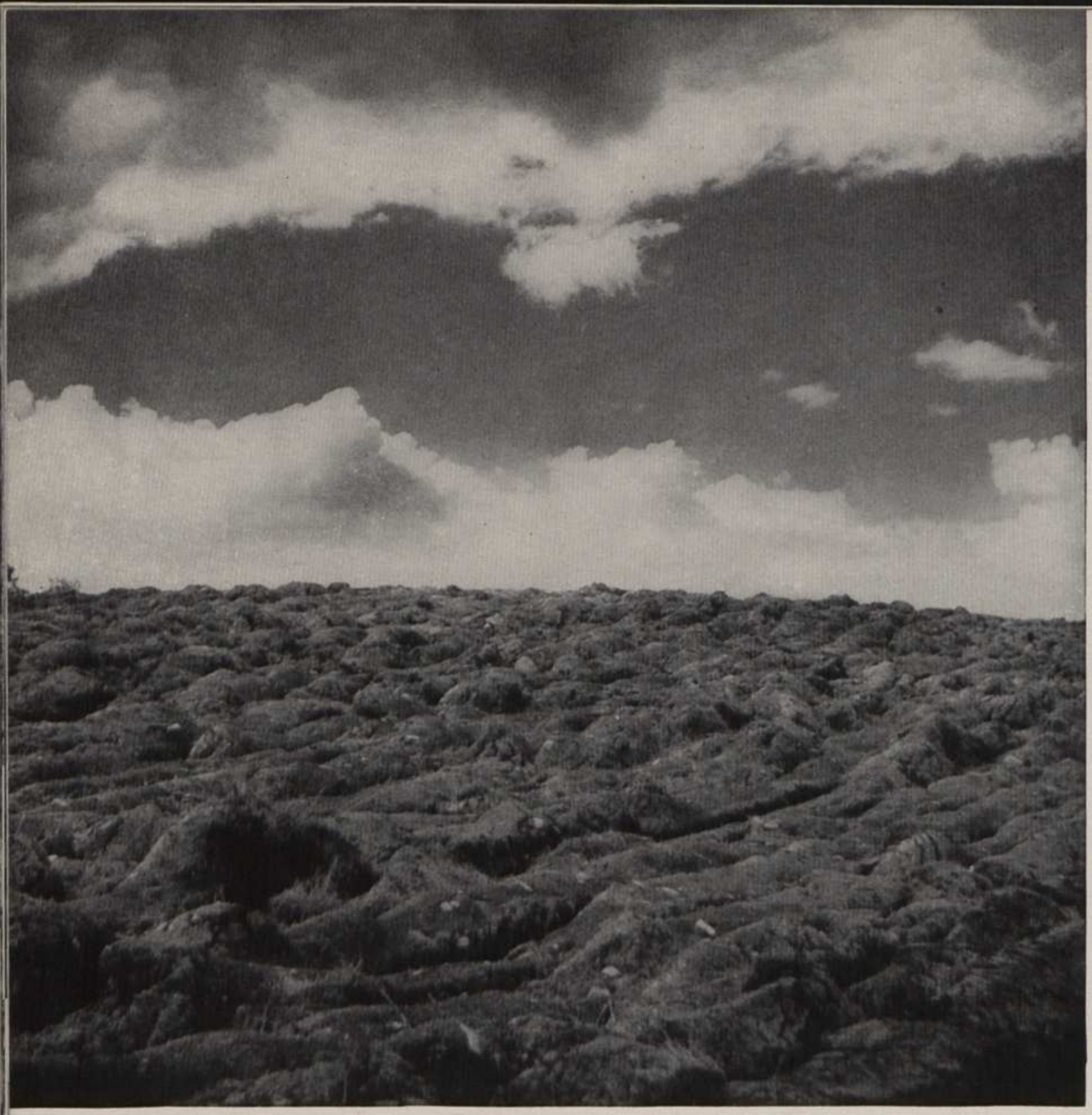
THE OIL SITUATION is already critical. Consumption has jumped by 45 per cent since 1940. As older fields are exhausted, the costs of finding and developing new fields have risen sharply.

The search for oil goes on relentlessly in remote sections of the world. The accompanying picture shows geologists testing an oil seep on the banks of the Mackenzie River in the Canadian wilderness.

And the same desperate search must go on for iron ore. For the vast reserves of the Mesabi Range in Minnesota and Wisconsin will be exhausted in a few more years; the steel companies are intensifying their search for new ore reserves.

The largest open-pit iron mine in the world — the Mesabi Range — was once thought "inexhaustible."





Here is a community man is apt to take for granted.

EVEN MORE ESSENTIAL than minerals to man's life on the planet are the earth's organic resources: soil, plants, animals, and water. When our forefathers came to America, they found a continent rich in virgin forests, clear waters, and productive soil — each a living community, undisturbed by civilization.

Man's westward march changed the environment in each community he used.

Are plowed fields forever fertile, or are they potential dust bowls? And how long will the nation's saw timber last?



And here is a community which man is apt to abuse.

FERTILE TOPSOIL IS PRODUCED slowly by nature through the years but its fertility can be destroyed by improper farming methods, and it can be washed or blown away in a few hours' time when unprotected and exposed to the elements.

Through misuse of the land, in the last hundred years, we have ruined one quarter of our tillable soil, and damaged half of the remainder.

Proper land management seeks to use the soil, as a living community, for the purposes for which it is best adapted, and to maintain its structure and its organic and mineral content undepleted.



America once possessed an abundance of rich topsoil.

Land broken to the plow
is vulnerable.



On May 11, 1934, a single
dust storm blew away
300,000,000 tons of topsoil.



NATURE'S BALANCE











OF THE MIRACLES OF NATURE none is more wonderful than the cycle by which nature creates life and nurtures it in productivity unless environment is changed. Nature's mechanism is complex; its essence lies in the interdependence of:

Soil
Plant life (from bacteria to forests)
Animal life (from protozoa to mammals)
Water

Soil is the source of all plant growth. But it requires water before plant life can emerge. Animal life, in turn, is largely dependent on vegetation, while the soil and plant life both draw essential elements from animal life and death. An equitable flow of water depends on the presence of extensive forest, grass and other vegetation. Change in any one of the four basic elements inevitably changes the condition of the other three. The community environment is changed.



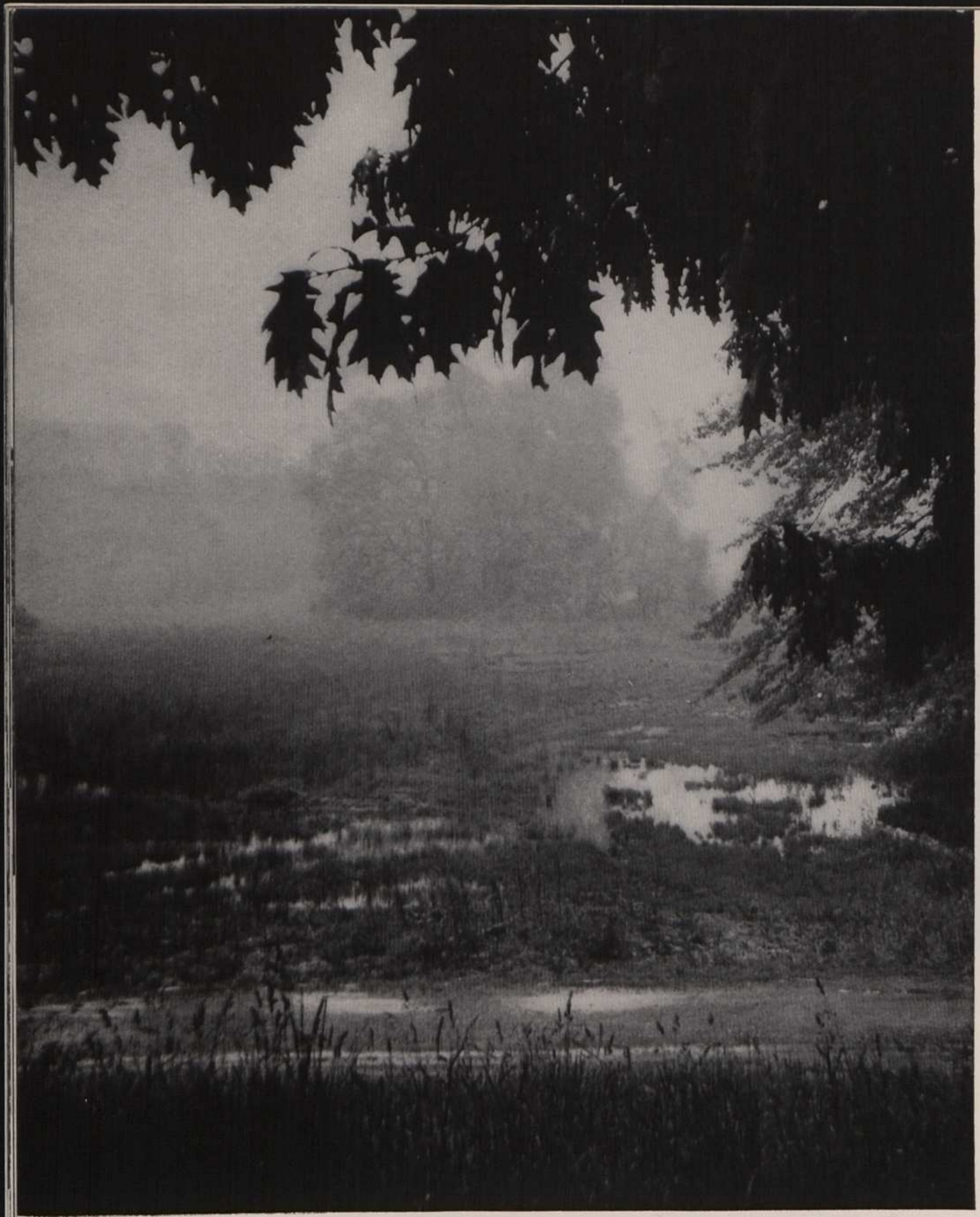
Each year forest fires burn areas larger than all of Delaware and Rhode Island combined.

WHEN COLUMBUS DISCOVERED AMERICA, nearly half of the land area of what is now the United States was covered by a dense primeval forest. Today these forests have been reduced to less than one-fifth their former size. Much of our standing timber today is poor quality second or third growth.

Man has cut large areas of timber, without provision for reseeding—and moved on. Fires, too often man-made, have ravaged millions of acres of land once in forest. Waste of trees, in lumbering, remains high even today. We are still cutting saw timber faster than it grows.



Without the forest the land
becomes easy prey to erosion.



Without water the land would become a desert.

EVERYONE KNOWS that the farmer depends on water, but most of us do not understand the extent to which modern industry depends on it. Huge quantities are used in the making of paper. It requires a ton of water "to finish the woolens" for a three-piece suit. It takes about one hundred and fifty tons of water to make a ton of steel.

Increasing manufacture and concentration of populations have created a tremendous increase in the use of water in many places. As a result, supplies have to be drawn from greater and greater distances. Many communities are faced with the specter of a water famine—due to excessive demand and changed land use. No civilization throughout history has been able, even by the most ambitious engineering effort, to replace water wasted in run-off from the destruction of forests.



Water is just as vital to a factory as it is to a farm.

Dams are costly "aids" to natural water storage.





But—a great share of our water is wasted each year in destructive floods.



And silt clogs our rivers and harbors.

When the soil is improperly cultivated, the rain washes away the topsoil.



The equivalent of half a million acres of farmland is washed away each year.





A heavy cover of grass protects soil from erosion by rain or wind.

FORTUNATELY, THE SUICIDAL WASTE shown on previous pages can be checked. The next pages show a few of the methods already being practiced to stop waste and restore environmental protection.

Grasses check some of the ravaging force of wind, storm, and flood. Their fibrous, close-growing roots bind the soil in position and keep it from being either blown or washed away. The blades break much of the force of raindrops, while fallen blades and roots serve as innumerable little dams to prevent water from washing the earth away.

Trees are another safeguard against soil erosion. With their canopy of foliage, they break the force of the wind and the rain and delay the melting of snow. They drop a carpet of leaves and twigs to protect the soil and form water-absorbent humus. Their roots bind the soil so that it cannot easily be washed away.

Some 63,000,000 misused acres need to be planted to young trees.

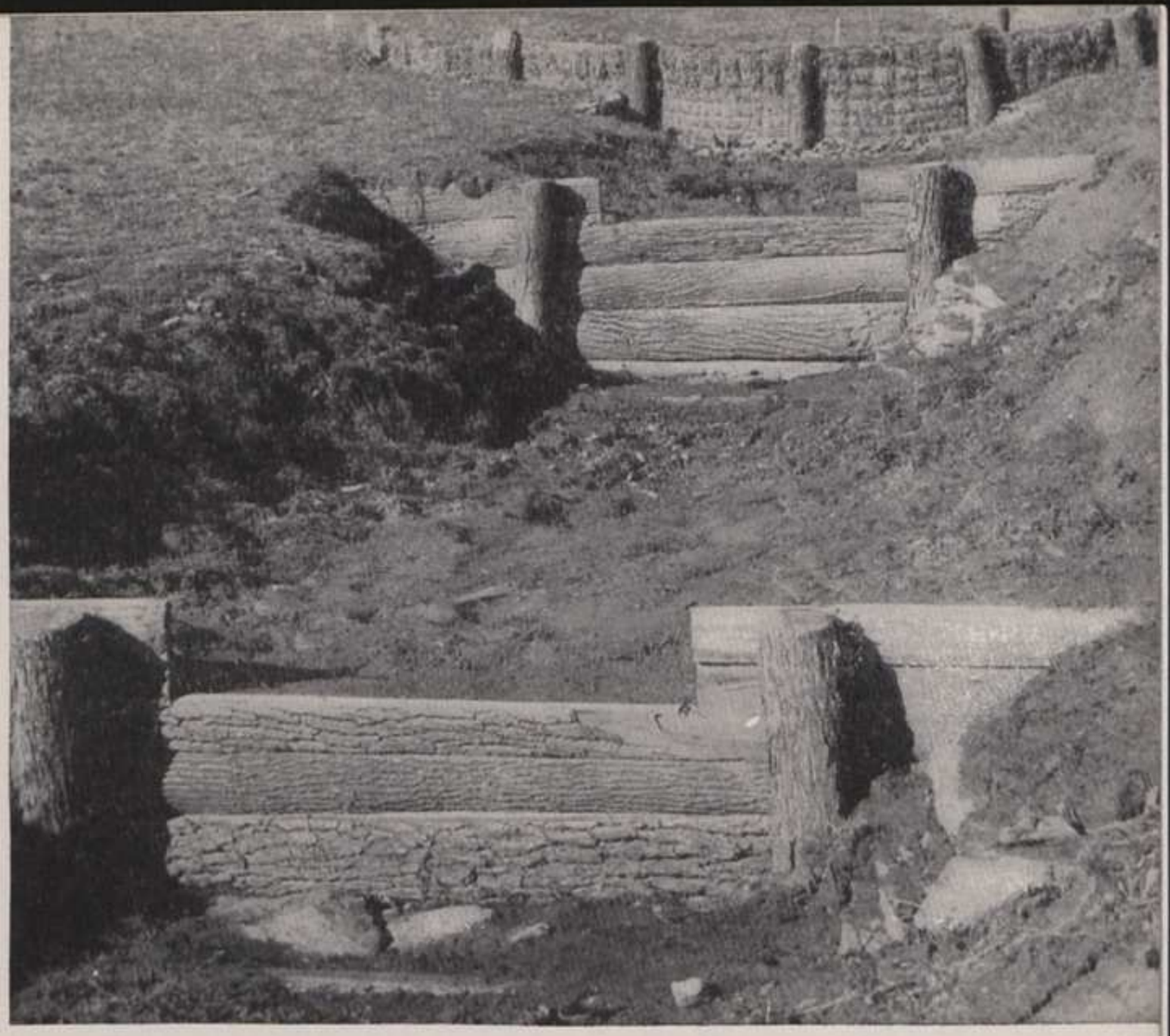




Erosion on cultivated hillsides can be checked by planting alternate strips of grass and crops along the contour of the land.

ALL OF THESE THINGS are being done today by far-seeing farmers, but, unfortunately, by far too few. The average farmer adopts these practices only if he recognizes their importance, believes it will pay in the long run, and has labor and cash available. More farmers must see that the nation's interest and their own make such practices imperative.

Slab and wire dams are one step in repairing a gully like this.



Rows of trees, acting as shelter belts, protect the soil against the wind and provide habitat for wildlife.





Selective cutting can make way for
the faster growth of young trees.

YOU, AS A CITY DWELLER, may be alarmed at the great drain upon our natural resources disclosed in these pages, but feel there is little you can do about it. That is where you are wrong. Each citizen, in a democracy, has the power to influence policy. True, it is the farmer, the forest owner, and the industrialist who must learn and put into practice conservation measures. But more needs to be done than they alone can accomplish. Governments must provide long-range plans, technical assistance, and education, and see that necessary work can be financed.

A much more vigorous program is needed without delay. But such a program is possible only with active support of all sections of the American people—particularly the city dweller who controls six out of every ten votes. Man must balance his demand and use with nature's own requirements if his natural heritage and his civilization are to survive.

A healthy farm community is a monument to man's ability to live with nature.



Behold, America! . . . . . .
Behold! thy fields and farms, thy far off woods and mountains,
as in procession coming,
Thy limitless crops,
Thy barns all filled,
The grapes that ripen on thy vines, the apples in thy orchards,
The inexhaustible iron in thy mines.
All thine, O sacred Union!
City and State, North, South, item and aggregate,
We dedicate, dread Mother, all to thee!
Our farms, inventions, crops, we own in thee! Cities and
States in thee!
Our freedom all in thee! Our very lives in thee!

—Lines from Walt Whitman



THE PICTURES

Front Cover. *Jim Mitchell*: Hand holding soil. Soil Conservation Service, U. S. Department of Agriculture.
Back Cover. *A. R. Leding*: Crater Lake, Colorado. Free Lance Photographers Guild.

PAGE:

2. *Lionel Green*: Mid-Manhattan. Frederic Lewis, New York.
3. *Ewing Krainin*: Crowds walking. Frederic Lewis, New York.
4. *A. P. Janion*: Food store. Free Lance Photographers Guild.
5. *John Mills*: Paper mill. Free Lance Photographers Guild.
6. *Lee*: Combines on a Texas wheat field. Standard Oil Company (New Jersey). (*top photo*)
   John Collier: Spring pulpwood drive. O. W. I. (*bottom photo*)
7. *McLean*: 40,000 bales of cotton. Soil Conservation Service, U. S. Department of Agriculture. (*top photo*)
   Forsythe: Hogs in Kansas City stockyards, U. S. Dept. of Agriculture. (*bottom photo*)
8. *Libsohn*: Hanna Furnace steel mill, Buffalo-Lackawanna, N. Y. Standard Oil Co. (New Jersey).
9. *Fons Iannelli*: Coal miner. Ladies' Home Journal.
10. *Collier*: Gravity meter in operation, Norman Wells, NWT, Canada. Standard Oil Co. (New Jersey). (*top photo*)
    Collier: Oil seep on the banks of the Mackenzie. Standard Oil Co. (New Jersey). (*bottom photo*)
11. *Bubley*: The largest iron ore mine in the world. Standard Oil Co. (New Jersey).
12. *Parks*: Freshly plowed field near Skowhegan, Maine. Standard Oil Co. (New Jersey).
13. *Leland J. Prater*: Stand of government-owned virgin mixed hardwood. U. S. Forest Service.
14. *Libsohn*: Plowing a field near Husband, Pa. Standard Oil Co. (New Jersey).
15. *E. W. Jenkins*: Breaking virgin native grass pasture. Soil Conservation Service, U. S. Department of Agriculture. (*top photo*)
    Dust storm. Soil Conservation Service, U. S. Department of Agriculture. (*bottom photo*)

16-17. *Graphic Associates*: Nature's Balance (chart).

18. *Wm. G. Morris*: Fire in Columbia National Forest, Washington, Summer 1936. U. S. Forest Service.
19. *S. T. Dana*: Erosion in a cut-over area of Colorado, U. S. Forest Service.
20. *A. Romero*: Rainy morning. Free Lance Photographers Guild.
21. Water sprays to control temperature, at Ashland, Kentucky plant, Armco Steel Corp. (*top photo*)
    Berlyn Brixner: Roosevelt Dam. Soil Conservation Service, U. S. Department of Agriculture. (*bottom photo*)
22. Flood. U. S. Forest Service. (*top photo*)
    Dredging Root River in the city of Racine. J. I. Case Company. (*bottom photo*)
23. Water running off slope on farm. Soil Conservation Service, U. S. Department of Agriculture. (*top photo*)
    Dale Swartz: Sheet-gully erosion on field plowed with moldboard plow. Soil Conservation Service, U. S. Department of Agriculture. (*bottom photo*)
24. *Victor De Palma*: Cows grazing. Black Star.
25. *K. D. Swan*: CCC boys planting on the slopes of the Coeur d'Alene River burned by the McPherson fire of 1931. U. S. Forest Service.
26. *George C. Lowary*: Strip cropping. Soil Conservation Service, U. S. Department of Agriculture.
27. Gully controlled by slab and wire dams. Soil Conservation Service, U. S. Department of Agriculture. (*top photo*)
    R. W. Hufnagle: A 10-row, ½-mile long shelterbelt planted in 1940 in Nebraska. Soil Conservation Service, U. S. Department of Agriculture. (*bottom photo*)
28. *Roy C. Carlson*: Ponderosa pine tree falling. U. S. Forest Service.
29. *Hermann Postlethwaite*: Artificial farm pond. Soil Conservation Service, U. S. Department of Agriculture.
31. Stacked corn. Keystone View Co.

ABOUT THIS PAMPHLET

IN THIS PAMPHLET the Public Affairs Committee has made extensive use of photographs for the first time in its rather lengthy experience in preparing educational materials for the man in the street. It represents a logical development in view of the fundamental purpose of the Committee which is "to make available in summary and inexpensive form the results of research on economic and social problems to aid in the understanding and development of American policy."

In order to assure the same high standards of scientific accuracy and objectivity which have marked the 16 million pamphlets published by the Committee, this pamphlet has been prepared with the cooperation and assistance of the Conservation Foundation. The purposes of the Conservation Foundation, as expressed in the Certificate of Incorporation, are as foliows: "to promote conservation of the earth's life-supporting resources—animal life, forests, and other plant life, water sources, and productive soils—and to advance, improve, and encourage knowledge and understanding of such resources, their natural distribution and wise use and their essential relationship to each other and to the sustenance and enrichment of all life."

This picture pamphlet, although included in the regular Public Affairs Pamphlet series, is higher in price because of its more expensive make-up. Single copies are 30 cents. Larger quantities are available at special rates: 10 to 24 copies, 24 cents each; 25 to 99 copies, 23 cents each; 100 to 249 copies, 20 cents each. Discounts on 250 or more will be quoted on request.

HAGLEY MUSEUM AND LIBRARY

Pam
2000.903

