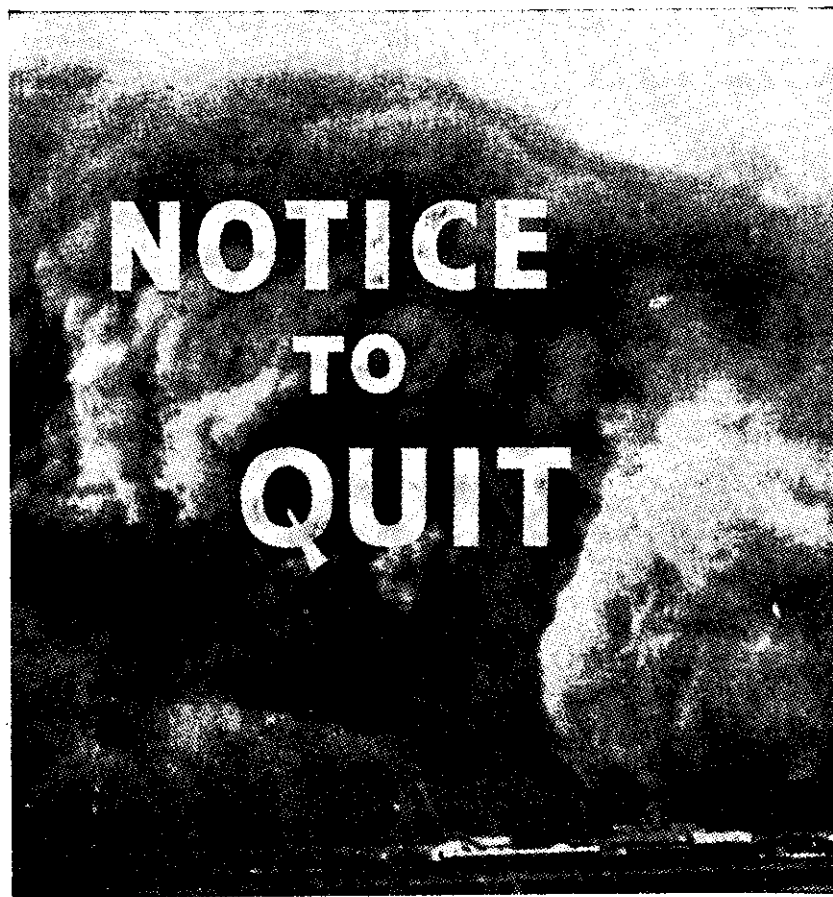


SOIL OVER THE CITY
has awakened Sydney to the fact that the few inches of Australia on which men can live are blowing away. Australian dust has reached various parts of the North Island, even having serious effects on our electric supply system.

ON May 12, 1934, three billion tons of top soil was blown two thousand miles across the United States. Men on the streets of New York tasted grit from the plains of Kansas. Dust blotted out the sun over Washington. New Englanders found their floors and furniture faintly red with the wealth of the prairies. The decks of ships in mid-Atlantic grew dirty with deposits from the heart of the Continent.

Americans, horrified and frightened, began to recast their way of life of 150 years. Flooding out over a virtually virgin continent, their great-grandfathers, grandfathers, and fathers had acted as if the land was illimitable and inexhaustible. But in 1907 "the frontier" came to an end in spectacular fashion. For in that year the native reserve called by the Indians Oklahoma, "The Beautiful Land," was thrown open, the last unoccupied area. Through the night before proclamation, intending settlers took their stations side by side, and in places several ranks deep, all round the boundary, and when day dawned advanced on foot, on horse, or in buggy until the new State was completely pegged out in its first day of existence. Yet only 30 years later "Okies" meant all over America vagrants, families whose farms had blown away. "The Beautiful Land" had become the "dust bowl." In many other States fire and water have wrought damage as great as wind's. Altogether in the United States' brief period of nationhood, fifty million acres of North America have become uncultivable, much of it forever, through excessive erosion and cropping. Another



★ **THIS** photograph of a dust-storm over Texas makes almost ★
 credible the story that during one such "duster" a prairie-dog was seen burrowing—50 feet up in the air. At Amarillo during March and April, 1935, there were 47 days on which dust limited visibility to six miles or less.

fifty million are on the verge of abandonment. One hundred million more, once arable, have become fit only for grazing.

Something Has Been Done

The "Great Duster" of '34 proved actually gain to the United States in that it dramatised this loss of two hundred million acres—an area four and a half times that occupied in New Zealand or Japan, and sixteen times that which supports Java's fifty million farmers.

Congress hastened to pass a Soil Conservation Act, and the Department of Agriculture, under Henry Wallace, himself a practical and scientific farmer, as well as a far-sighted economist, hastened to mobilise country people to make it effective.

To-day, 10 years after, they have achieved only 10% of the total work that will be needed to prevent the remainder of arable America from dissolving into the air or streaming into the

SOIL OVER THE CITY
scared Americans ten years ago into changes in agriculture. Their progress in soil conservation to date is here reviewed for "The Listener" by A.M.R.

sea. But progress is claimed to be actually much greater than these figures indicate. For the essential techniques for stabilising the top soil seem to have been discovered. And, what is more, they have proved themselves to be not merely effective for this long-term purpose but immediate money-makers as well, so that farmers have every incentive to apply them.

Contour Cultivation

Fifty-nine major techniques are in use. The most important, and certainly the most spectacular, is that called "Contour Cultivation" — an innovation which the Soil Conservation Service chief claims "will one day rank in importance with the discovery of the wheel and the use of fire." As photos and farm maps show, it has changed the face of large areas already. The biggest work in it is getting your present fences down. After that you simply fit a long U-tube containing water along the bonnet of your tractor with a glass section in front of the steering wheel and mark out your strips by ploughing so that the water level stays constant.

With contour cultivation goes "strip cropping" and "terracing." The latter consists in getting a bulldozer to build up gently sloping mounds so many yards or chains apart along your hill slopes. Each mound, of course, snakes along the contour and has grass-paved waterways at its ends to discharge harmlessly the water which the ridge holds up during a storm—or more correctly, the excess of such water, for most of it soaks into the ridge itself. The ridges are made sufficiently broad-based not to give way under their saturation with water and have sides sloping gently enough to make their ploughing possible.

Billions of Natural Little Dams

"Strip cropping" consists in alternating dense crops such as wheat with clean-tilled crops such as peas, or, alternatively, in running ribbons of tall plants



NOT A GIANT WAFFLE-IRON, but a Texas plain, "basin-listed on the contour." Every drop of rain that falls will be cradled in these eight-foot-long water traps.



A DRINK for next year's crop: the water that now brims these "contour-listed" furrows will sink in deep and stay.