

CONSERVATION

Once More the Dust

"Invading Army" Relentlessly Destroying Productive Land is Closing in on Grain Belt From Three Sides

By PROF. PAUL B. SEARS, University of Oklahoma, Author of "Deserts on the March"

IMAGINE an invading army, relentlessly destroying productive farm lands, closing in on the grain belt from east, south, and west, and you will have a picture of the way wind and water are gnawing into the vitals of the United States. Beginning along the Atlantic coast, and across the southern Piedmont area, the progress of the invader has been marked by a belt of water-worn land, widening steadily since settlement. Land abandonment in New England is an old story. In the Piedmont area the disruption of balanced agriculture has dislocated population, throwing hordes of workers into industrial centers, affording a great reservoir of cheap labor, and creating problems faster than they can be solved.

Now the destroyer is closing in from the west, using wind as a weapon and signalling his advance in clouds of dust which reach literally into the high heavens. We have opened the gates to him by removing our own best defense—the eighteen inches of shortgrass turf which originally covered the high plains. This was done in a reckless gamble which makes the Mississippi Bubble seem like a penny-ante game. Since 1920 thousands of square miles of the shortgrass sod have been plowed by power machinery for the growing of wheat. So hazardous is this enterprise that, had the price been stabilized at a dollar a bushel, it would have been operated, on the average, without gain, because periods of drought are inevitable in this region. The native grass is adjusted to them, the wheat is not.

Russian Thistle Useless

Today there is much abandoned land, on which the principal weed, if there is any, is the Russian thistle, which affords absolutely no protection against the winds of winter and early spring. The wheat, on land which has been seeded, affords inadequate protection and is itself being blown out of the ground. The stubble where "bundle-feed" such as

Kaffir corn has been grown is being etched away. At the present time listed land, plowed into deep V-shaped furrows, seems to be fairly well protected. But there is some reason to believe that prolonged dry windy weather will start it to moving. The greatly reduced area of native sod, unless it has been very heavily grazed, remains stable, even on the looser soil types.

To those remote from this area the dust storms are novel, perhaps startling. Within two hundred miles of the Plains they are annoying and costly, causing enormous trouble to telephone companies, for example, to say nothing of housewives. But in the dust-area itself, the storms spell disaster, physical, economic, and social.

There is no magic formula for cure, any more than there would be if the advancing enemy were an army of humans. In that case we should have to rely upon the general staff for plans, and the army for their execution.

General Staff

We have today a general staff of scientists, above politics, and eminently practical—the Science Advisory Committee. To execute their recommendations we have appropriate arms of government, notably the Soil Conservation Service and the Forest Service. The Science Advisory Committee has already urged the joint cooperation of local, state, and federal agencies in the prevention of erosion. There is, however, great danger that are stricken communities will come to depend too much upon an overburdened government, not only for guidance and information, but for actual physical aid. This in the end would not solve the problem of reestablishing local equilibrium.

Nor is it amiss to suggest that manufacturers' associations and other powerful financial groups whose ultimate welfare depends upon farm prosperity would do well to enlist their technical and commercial resources actively in the struggle. If they used the energy which was available for stimulating and supplying farm markets during the period of expansion, it would go far towards insuring future markets.

We shall see increasing pressure for immediate, effective action. This is entirely proper, and is the concern of every citizen. It is estimated that the country will require an additional area of about 50,000,000 acres of crop land in the next three decades. We have none to waste, quite apart from the question of local prosperity in the suffering areas.

It is essential that whatever measures are advocated in the heat of emergency bear the stamp of approval of our scientific general staff, the Science Advisory Committee. The problem symbolized by the dust-storms is neither local nor temporary. It must be approached from the standpoint of permanent and national benefit.

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SURGERY

Fingers Replaced With Toes by Transplantation

REPLACING a highly valuable but missing finger with a relatively useless toe is the latest surgical feat reported by Prof. M. I. Kuslik, noted surgeon.

The woman patient, reports Prof. Kuslik (*Archives of Surgery*, January) had an unsightly stump in place of the index finger on the left hand as the result of an accident while tobogganing.

The operation consisted of removing the greater part of the second toe on the left foot and transplanting it on the finger stump. Five weeks in a plaster cast permitted the dissimilar parts to join. Photographs show the reconstructed finger in use.

As the *British Medical Journal* comments (Feb. 22) "the reconstruction both looks well and appears to be very serviceable."

Besides the increased utility the patient's mental state is much improved, states Prof. Kuslik.

Adds the *British Medical Journal*:

"Prof. Kuslik's case is not the first of its kind, but appears to have been one of the most successful. Since 1897, when Nicoladoni first suggested the practicability of the transference, there have been numerous reported efforts, and up to 1930 Prof. Kuslik had been able to trace seventeen, two of which had been able colleagues of his in Russia.

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