

## TREES CAN'T BREATHE SMOKE AND LIVE

Trees can not breathe smoke and be healthy.

Away from the fresh winds of the great open spaces they droop and die like country maidens.

Such has been the experience, at least, of the St. Louis municipal park department. Efforts to establish trees within the smoke area created by the industries of the city, which includes some of the most prominent public buildings, are proving failures.

Sycamores and poplars, supposedly smoke resistant, succumb within two or three years. The only tree which seems to thrive in such localities, a veritable child of the slums as it were, is the Tree-of-Heaven, or Ailanthus.

Shrubs show much the same tendency. Privet has proved the most resistant - but even this is dying out. Lilacs, when they live, seldom bloom. Blue grass lawns are impossible except for a short period in spring.

Evergreens have proved unable to endure the smoke. Trees that formerly flourished are dying as the smoke area is extended. The oaks in one of the principal city parks are dying rapidly, indicating that the smoke has reached them, although it is not noticeable otherwise.

The St. Louis officials have decided that, after all, the city is no plan for healthy shrubs.

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GERMAN ACID TREATMENT IMPROVES COTTON CLOTH

At a meeting of leading German industrial chemists a discovery was announced that is expected to have far-reaching effects in all branches of cotton manufacture. The essential step in the process is a treatment of the cotton in highly concentrated nitric acid. This causes the fibers to contract and curl up, so that they come to resemble wool both in appearance and in their lowered heat conductivity. At the same time there is a gain in coloring properties, tensile strength and elasticity. It is claimed that after the acid has been removed no detrimental effects remain. One large cotton-spinning and dyeing concern in Germany is already making a large-scale application of the new process.

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SEES FUTURE FACTORIES GROWING OWN FUEL

Does the photo-electric process of accelerating plant growth contain the answer to the future power and fuel problems of the world?

No less an engineer than E. W. Rice, jr., honorary chairman of the directors of the General Electric Co., raised this question in an address before the World Power Conference in London recently.

In other words, is there a prospect of industry creating forests fast enough to supply its furnaces?

Mr. Rice said: -

"Sunlight, including all radiation from the sun, is the source of our commercial power, no matter what the intermediate agent - coal, oil, water or wind. The direct transformation of solar radiation has been sought, but it is probably too intermittent because of the cycle of night and day and the intervention of clouds to be utilized directly. The most promising solution would seem to come through storage in growing vegetation. Improved methods of selection and of the acceleration of such vegeto-chemical storage of the sun's radiation may be discovered and should be diligently sought.

"It has been suggested that the photo-electric process may contain the germ. Such phenomena should be investigated, if for no other reason than that we are here dealing with the electron."

The oft-made proposal to drill a hole ten to twelve miles deep through the earth's crust with the object of utilizing the heat of the globe in producing power, also was endorsed by Mr. Rice.

Whether the project proved practical or not, he said, the cost would be trivial (less than that of a single battleship) compared with the information that might be gained by investigation of this unexplored region of the earth

The project is worth undertaking, he said, as an international scientific enterprise.

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TABLOID BOOK REVIEW

CHEMISTRY APPLIED TO HOME AND COMMUNITY. A Textbook and Laboratory Manual. By Pauline G. Beery, Assistant Professor of Chemistry. Pennsylvania State College. Philadelphia: J. B. Kippincott Company.

A remarkable textbook; one that is really readable. Open it anywhere and your eye will catch an interesting item, a curious fact, a household hint, a bit of history, a biographical anecdote or a literary quotation. For the author realizes the importance of historical perspective and human interest. She does not disdain to tell about the composition of cosmetics, the removal of stains, the testing of textiles, the fastness of dyes, the balancing of dietaries, the beauty of pottery and other topics of particular interest of women. The question and topics for additional consideration are stimulating and pertinent, and the references for further reading in books and periodicals are exceptionally full and up-to-date. With this book on a handy shelf, the librarian or teacher will be ready with an answer or a reference to the practical questions put to her.

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A hay laboratory has been established by the U. S. Department of Agriculture at Kansas City.

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The National Park Service is giving away buffaloes to municipalities and other public organizations that will pay for the cost of capture and transportation from Yellowstone Park.  
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