

They do not share the optimism of the Chancellor of the Exchequer, who declared recently before an audience of bankers that Britain has recovered 80 per cent. of her prosperity. They see "75 per cent. of our population living on or under the border-line of poverty," and hold that "we cannot be surprised at the economic unrest that obtains in so many quarters."

Finally, the opinion is expressed: "Until some solution or amelioration of the problem of the existence of poverty amidst plenty is forthcoming, substantial national progress seems out of the question."

Science News Letter, September 14, 1935

PLANT PATHOLOGY

Disease-Weakened Plants Fall Prey to Other Ills

PLANT diseases, no less than diseases of human beings, give new point to the old adage that "troubles never come singly." A plant, weakened by the attack of one fungus, falls prey to some other disease the more easily, just as a man may be prepared for pneumonia by an attack of the "flu."

Cases in support of this thesis were cited by F. T. Brooks of Cambridge University, in his presidential address, delivered before the botanical section of the British Association for the Advancement of Science.

When a log lies rotting on the ground, it is attacked by one fungus after another, as a rule, rather than by several species of fungi simultaneously. The species observe a regular order in their coming and going, resembling the "succession" among higher plants, where an oak forest, for example, succeeds one of pine, and afterwards beech and maple may replace the oak.

Varieties of wheat, bred to be especially resistant to the rust disease, may be attacked by mildew. Afterwards, rust is able to invade them where the mildew has been growing on their stems and leaves. The same "preparation" for rust may be made by another fungus disease known as bunt.

Another combination involves fungi and the invisible viruses of such diseases as leaf mosaic. The fungal cause of the terrible potato-blight disease, that caused famine in Ireland in the 1840's, followed by wholesale waves of emigration to America, was once resisted by Irish potatoes which now cannot hold out against it at all. Mr. Brooks cited the opinion of one of his colleagues that this increase in susceptibility was due to the prevalence of the virus disease, potato mosaic.

Science News Letter, September 14, 1935



Dislocated Names

RATHER odd, how we misname many familiar plants.

Water lilies, for instance, are not lilies at all. Neither are they what the Germans call them, "water roses." They are more nearly related to the flowers of the magnolia tree.

Again, that beautiful flowering tree called tulip poplar throughout the South and a large portion of the East is not related very closely to either the tulip or the poplar, though its flowers do look rather like tulips, and its large growth, broad leaves and soft wood do suggest the poplar. It also is a fairly close botanical cousin of the magnolia.

Calla lilies are not lilies. They belong to the arum family, being relatives of jack-in-the-pulpit, caladium or "elephant-ear," and the strange, ill-smelling giant flower that sometimes get publicity under the name of sacred African lily.

Squirrel corn is not corn, and has nothing in common with corn. It is a small white spring wildflower, related to the more familiar Dutchman's-breeches and the red-and-white bleeding-heart of old-fashioned gardens.

Dogtooth violets are not violets, but lilies. The asparagus-fern of the florists

is really a fine-leaved asparagus, not a fern; it might more appropriately be called fern-asparagus. The Spanish moss that drapes trees in the South is not a moss, but a relative of the pineapple.

Many plant names arise from similarities in shape to more familiar growths. Thus, grass has lent its name to the little flower known as blue-eyed grass, which is really an iris; also to the marine eel-grass, which belongs to a distinct family quite remote from the grasses.

Similarly, we have reindeer moss, which is a lichen; flowering moss, which is a portulaca, and "water moss," which is a name loosely applied to any fine-leaved or finely-divided green growth found in wet places.

Almost any spreading-topped tree or other tall plant in the tropics is apt to be called a palm, whether the name is botanically appropriate or not. Thus the traveller's palm, the screw palm and the umbrella-palm are all members of quite diverse plant families. As a matter of fact, they do not even look like palm trees.

Science News Letter, September 14, 1935

AVIATION

New Giant Soviet Planes To Have 206-Foot Wing Span

FIRST scanty details of the design of the sixteen giant airplanes which will take the place of the ill-fated "Maxim Gorky" have been released by the Soviet Government.

The new planes will be of the all-metal monoplane type powered by six engines, each of 1,200 horsepower. The Maxim Gorky had eight engines of 850 horsepower each.

Designed to carry from 60 to 70 passengers, the new planes will have a top speed of 167 miles an hour.

The wing span of each "ship" will be 206 feet, the over-all height 36 feet, the length 111 feet and the distance between the landing wheels 34 feet.

Science News Letter, September 14, 1935

SUBSCRIPTION ORDER COUPON

To Science News Letter, 2101 Constitution Avenue, Washington, D. C.

Please start renew my subscription to SCIENCE NEWS LETTER for 2 years, \$7
 1 year, \$5

Enclosed find check. Please send bill

Name.....

Street Address.....

City and State.....

Extra postage charges: 50c a year in Canada; 75c a year in foreign countries.

