

MEDICINE

Sick Certificates Put Soviet M.D.s on Spot

► SOVIET DOCTORS have their troubles. Those of the 12 arrested on charges of plotting murder of high communist officials and then released were dramatic. But each Soviet man in white has everyday problems that could end disastrously for him.

Some of these are reported by Mark G. Field, fellow of Harvard University's Russian Research Center.

In addition to trying to diagnose his patient's ailment, the Soviet doctor must be able to detect whether the patient is really sick or malingering. A mistake either way could get him into serious trouble.

Soviet law penalizes a worker a maximum deduction of 25% of his income for a 20-minute tardiness. This puts a high premium on the official sick certificate signed by a physician which would give the worker a sure way of escaping punishment.

But quotas of excuses are established and a doctor who exceeds his norm would have to account for it. The doctor therefore often has to look helplessly on while refusing medical help to those who need it or refusing dispensation to those who morally deserve it.

The doctor lives always in fear of agents provocateurs who, coming in the guise of patients, may entice him into an illegal action and report him to the authorities.

In addition, patients and their relatives may take revenge on the doctor by lodging grievances with a labor union, with the ministry of health, or, in extreme cases, with the organs of justice.

This may have dire consequences, Mr. Fields points out, especially if the state is interested in arranging a demonstration trial to display its concern for the welfare of the toilers.

Mr. Field's report, based on interviews with 21 former Soviet physicians and medical personnel and questionnaires completed by 1,600 former Soviet citizens in a survey made in Germany in 1950-1951, is published by the University of Chicago.

Science News Letter, May 2, 1953

Lard oil was the first cutting *lubricant* machinists used.



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**Whence May Flowers?**

► PERENNIALLY, as sure as it rains in the spring, we hear the chirping reassurance: "April showers bring forth May flowers!" This is true in a way, but in a larger way it is not.

It is true that the warm rains of April trigger the explosion of bloom that comes in May. They provide moisture to fill the rapidly expanding leaves and stems and flower-buds, and the warmth speeds up the growth. But it could be possible for flowers to bloom in May if not a drop of rain fell in April—though that latter contingency is hardly imaginable in most places. If there were deep snows and a slow thaw in March,

and a bit of rain as May came in, the flower show would still go on.

For the flowers are all there long before April showers evoke them. Packed away as fairly well-developed, though small, beginnings in bulbs, corms, rootstocks, tubers are the leaves and stems and flowers that will unfold as the rising warmth stimulates them and as they greedily suck moisture through the roots into their expanding cells.

You can prove this for yourself, if you like, by sacrificing a hyacinth or tulip bulb, splitting it fairly down the middle and searching for the tightly-packed flower primordia within the innermost scale.

In most spring-blossoming plants, the flowers and new leaves that gladden our eyes in May are actually formed and put in winter storage some time during the preceding year. This is certainly true of flowers on woody plants, such as lilacs, magnolias and tulip-trees, in which next year's buds begin to form even as this spring's buds begin to unfold. It is true also of the perennial herbs that depend on underground storage organs, which are stocked with food, principally starches and sugars, during the post-flowering time in late spring and summer.

But it is not merely the forming and stocking of what are to be next spring's flowers that predetermine the beauty we are to see in May. Winter helps, too. A very large proportion of our best spring flowers will not unfold unless they get a thorough chilling after the buds are formed. This is true of such familiar and favorite flowers as dogtooth violet, trillium, spring beauty, lily-of-the-valley and many others. April showers may bring forth May flowers, but December freezes must come first.

Science News Letter, May 2, 1953

ENTOMOLOGY

Fruit Fly Invader

► LIKE THE "wetbacks" who secretly cross the Rio Grande to enter the United States, the Mexican fruit fly has broken past our border guards and established itself in lower Rio Grande Valley citrus orchards.

To keep the fruit fly from spreading, the U. S. Bureau of Entomology and Plant Quarantine is now requiring heat sterilization of all grapefruit, the principal citrus crop, from this area that will cross state lines.

The Mexican fruit fly, which causes an estimated 30% loss in Mexican citrus crops annually, has been known in the Brownsville, Texas, area for many years, but prompt and continuous action of the government entomologists has kept it under control. The fly has never become established in the U. S. outside the Rio Grande valley.

This season, however, citrus growing in the valley has reached largest proportions than at any time since 1948, when frost severely damaged the orchards. And along with increased citrus production has been an

increased abundance of the pesty fruit flies, which lay their eggs in the fruit.

In the sterilization process, the grapefruit are placed in very moist air raised to a high temperature. This kills any fly eggs and larvae present without damaging the fruit.

Science News Letter, May 2, 1953

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By B. W. ANDERSON

Director, Precious Stone Laboratory, London

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