Solution B—Dissolve 1 gram (1 gm.) of sodium aluminum sulphate (sodium alum) in 100 cc. of physiological salt solution (0.85%). Any turbidity in this solution should be removed by filtering one or more times through the same filter paper.

Mix solutions A and B in equal amounts. The resulting mixture, which contains 0.5% picric acid and 0.5% alum, is sufficiently antiseptic to prevent the growth of organisms and is ready for use as a spray. Homemade concoctions are not favored.

Science News Letter, July 25, 1936

MEDICINE

## Short Syphilis Treatment Has Been Successful

THREE Chicago scientists believe that they have succeeded in decreasing materially the long period of treatment necessary for persons who have syphilis in its early stages. They further feel that their methods bring the eradication of the disease in its early stages one step nearer realization.

Dr. Clarence A. Neymann, Dr. Theodore K. Lawless and S. L. Osborne have merely combined the recognized fever and drug treatments of syphilis, and the results have been highly satisfactory. (Journal, American Medical Association, July 18.)

The average time consumed in this combined treatment is forty-two days. An average of five sessions of fever were given each patient and an average of five injections of neoarsphenamine were given during the treatment period. A small amount of bismuth salicylate was also used.

### Test Cases

Fourteen cases of early syphilis were treated with hyperpyrexia; that is, the patients were given a high fever. Half of them simultaneously were given arsphenamine and bismuth compounds.

The seven treated by fever therapy alone developed further signs of the disease. The seven given the combined treatment have shown no clinical signs of syphilis for periods ranging between five and eighteen months.

"This entire treatment presupposes an organized expert medical and nursing staff trained in giving hyperpyrexia treatments and the hospitalization of the patient during twenty-four hours for each session of hyperpyrexia," the three medical scientists state.

Science News Letter, July 25, 1936

METEOROLOGY-AGRICULTURE

# In Tennessee Valley Also Drought Did Great Damage

**D**ROUGHT came early to the Tennessee valley—came early, and was broken early.

It was broken before dry weather elsewhere in the country began to get widespread attention. But the heavy rains that broke it did not repair damage already done by the most severe spring and early summer drought ever recorded at the Knoxville station of the U. S. Weather Bureau.

For 81 days, April 12 to July 1, only 2.69 inches of rain fell, and that came in scattered light showers. This was only one-quarter normal precipitation for the period. Though these observations were made in Knoxville itself, they are representative of the Tennessee valley as a whole.

University of Tennessee agricultural authorities estimate the damage for that state alone as between forty and fifty million dollars.

The hay crop was reduced sixty per cent. Farmers began to sell their dairy cattle because they had no feed for them, and in some cities the price of milk went up. Since the rain, forage crops such as millet, Sudan grass, soybeans, cowpeas and sorghum have been planted in an effort to make up the shortage.

#### Too Late to Plant

Only sixty per cent of the usual tobacco acreage had been set before the rain, and now it is too late to plant more. Early garden and truck crops were cut from fifty to seventy-five per cent, and now late plantings are being made in the hope that farmers will have vegetables to can for winter use.

Corn and cotton have suffered least, but there had not been time to plant a full crop before the rain came. Some corn is now being planted for silage. Wheat, barley and rye were little affected. Spring oats were a failure.

If corn, cotton, tobacco and the newly planted crops are to be successful, there must be more rain. None has fallen since the drought-breaking precipitation at the very first of the month. As late summer and fall are normally seasons of lightest rainfall in this section, the outlook is not altogether bright.

Though the drought retarded the filling of Norris dam, enough water was

stored so that some could be released to raise low water levels of the lower river. On June 19 the sluiceways were opened to maintain navigable depths below Chattanooga. Ninety-seven thousand acre-feet were discharged, and the lake level was reduced by more than four and one-half feet. The gates were closed again on July 3, following the heavy rains. By July 10 the losses had been more than made good.

Despite the fact that Norris Lake gates were not closed until March 4, the lake would have filled to the normal 1,020-foot level by July 20, had there been average rainfall, with no necessity for an emergency release of water. There were 1,436,900 acre-feet of water in the lake when the draw-down began. Total capacity at maximum flood level of 1,052 feet is 3,400,000 acre-feet.

Science News Letter, July 25, 1936

ARCHAEOLOGY

### Germans Build Museum For Prehistoric Art

**G**ERMANY'S famous art galleries are to have a new addition—an exhibit of prehistoric art.

Wall pictures that the world's first artists painted in dim caverns or on cliffsides have been copied by expeditions led by Prof. Leo Frobenius, of Goethe University, Frankfurt am Main. To house the 3500 pictures, large and small, the German government is considering the construction of a special museum.

Evidence that there were two schools of art, even in the dawn of art history, is revealed by cave paintings in France and Spain. The eastern Spanish style was carried out in one color and depicted human beings as well as animal figures. The Franco-Cantabrian style, executed in polychrome, depicted animals exclusively. Both styles apparently flourished in the territory at the same time, Professor Frobenius concludes.

The fact that frescoes found in caves and on cliffs in Libya, North Africa, show resemblance to the Spanish style is regarded as evidence that Spain and North Africa made a territory of uniform artistic culture, 30,000 years ago.

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