supply can never be obtained without direct bacteriologic supervision of dairy water supplies.

Again, this epidemic points out the crying need of commercial pasteurization properly supervised and carried out. The Richmond epidemic¹ was an overwhelming argument for pasteurization as a logical safe procedure. There is no doubt that a bacterial count as a standard for the cleanliness and sale of milk is insufficient protection against such outbreaks as this. The sense of security a low count gives is fallacious when one considers the many pathogenic organisms which may be present in milk and yet not demonstrable in a bacterial count alone.

Ordinarily, a milk epidemic is explosive in its outbreak, as this was, the infection being carried to all users of a given supply at practically the same time, thus causing a relatively large number of them to develop the disease simultaneously. Usually, in epidemics of this type, the number of cases is large; but the approximate opposite occurred here. Only a small proportion of the users of the infected milk developed the disease.

The sudden concentration of the contamination of the water with typhoid, as demonstrated by the evidently infinitesimal quantities of the infected water left after rinsing, and the consequent possible escape from infection by a large number of bottles may account for the small number of cases.

Taking into consideration the report² of the California State Board of Health on typhoid fever in California for 1909-1914, the average annual death rate per hundred thousand from typhoid in Colusa County was 64.7, the highest average county rate in the state. The state rate as a whole for this period was 11.1. This milk-borne epidemic is the first recorded in this county, and the influence of milk as a disseminator of typhoid, as shown by this small outbreak, would not seem to affect to any appreciable extent the total typhoid incidence, yet it demonstrates fully the potential danger of milk and adds another argument to the propaganda for better supervision of milk supplies.

SPOROTRICHOSIS: REPORT OF A CASE

CHARLES L. SEITZ, M.D., EVANSVILLE, IND.
Pathologist, the Walker Hospital

R. L. Sutton, who has probably seen more cases of sporotrichosis in this country than any other person, says: "There are many busy practitioners who have never even heard of sporotrichosis. For this reason, I believe that all recognized cases of the affection should be reported, during the next few years at least, in order to disseminate as widely as possible a knowledge of its characteristic symptomatology." With this idea in view, I wish to put the following case on record, the third, I believe, which has been reported from this state:

W. B., man, aged 25, florist, came under observation, Aug. 5, 1914. May 31, 1914, he punctured his left thumb with a rose-thorn. Some time afterward the thumb became sore and inflamed, and some pus was evacuated from it. About two weeks after this, soreness developed in the left axilla and he had great difficulty in raising the arm on account of the stiffness and pain. He consulted a physician at this time who considered the pain to be rheumatic. Soon after this, several hard nodules resembling boils, but only slightly painful, developed on the radial surface of the left forearm, and others continued to develop, so that when first seen there were more than twenty nodules extending from the thumb up the outer

and anterior surfaces of the forearm, across the front of the bend of the elbow, and then along the inner aspect of the upper arm, thus following the course of the lymphatics from the thumb. The nodules varied in size from that of a pea to that of a large marble, they were dusky red, and tenderness was absent or slight, being most noticeable in the more recent nodules. Some were superficial and were located in the skin; others were in the subcutaneous tissue. In the region of the extensor tendons of the thumb, in the wrist, and in the region of the biceps tendon, considerable deep, diffuse induration was present. In view of the characteristic clinical picture, a tentative diagnosis of sporotrichosis was made, which was confirmed by further examination. At this time, one nodule near the middle of the upper arm presented slight fluctuation, and when it was incised, a small quantity of viscid, grayish-yellow pus was evacuated. Microscopic examination of this pus revealed no organisms of any kind, but cultures on plain agar and bouillon gave pure cultures of the sporothrix after about ten days. The cultures varied considerably, some showing mostly mycelium and others mostly spores. Subcultures from the primary cultures gave visible growth in a shorter period, in two or three days. Several nodules developed after the patient came under observation, and these were of a brighter red and were more painful than the older ones.

The sporothrix was also later obtained in pure culture from several other nodules, which softened and were incised.

The patient was given potassium iodid in 15 grain doses three times daily for three days. In the meantime there developed an acute urethritis with extension to the posterior urethra, and at his request the medicine was discontinued because he thought it increased the irritation in the urethra. He was then given hexamethylenamin, $7\frac{1}{2}$ grains four times daily, and this was continued for several weeks. It is an interesting fact that the patient under this treatment made steady progress toward recovery, and in less than three weeks, recovery was complete. A number of the nodules underwent softening and spontaneous opening, followed by prompt healing, while others disappeared without softening.

REPORT OF VACCINATION EXPERIMENT AT STATE HOSPITAL FOR NERVOUS DISEASES, LITTLE ROCK, ARK.

C. W. GARRISON, M.D., LITTLE ROCK, ARK.
State Health Officer

As there has been some agitation in the state as to the method of vaccination, the following experiment was carried out at the State Hospital for Nervous Diseases, Little Rock, by the courtesy of E. P. Bledsoe, M.D., superintendent:

Twenty-five persons were selected who showed no evidence of previous successful vaccination, and, Nov. 16, 1916, oral vaccination, consisting of one tablet of vaccinum daily for seven days, was administered, this being the time purported to immunize by this method of vaccination. On the eighth day these twenty-five persons, excepting the one who developed smallpox while taking vaccinum, were vaccinated by scarification or the regular method of vaccination, with the following results:

Of the twelve persons vaccinated by Dr. C. A. Arkebauer, by scarification, there were ten positive and two negative; and of the twelve vaccinated by Dr. Pat Murphy, there were ten positive and two negative, and one person developed smallpox before all vaccinum tablets had been administered.

In the foregoing experiment Dr. Scott C. Runnells, Homeopath, of Little Rock, directed the administration of vaccinum. It may be seen that twenty out of the twenty-four persons purported to have been immunized by the oral, or vaccinum, method had successful vaccination by the scarification method subsequently. Consequently, this proves conclusively the inefficacy of the former method of vaccination.

The Author of the Mendelian Law.—Gregor Mendel, peasant boy, monk and abbot of Brunn, an experimental botanist whose work in his cloister garden laid the foundation of that exact knowledge of heredity which is now being extended in many directions, was born July 22, 1822. He died in 1882.

1. Geiger, J. C., and Kelly, F. L.: Pasteurization of Milk Supplies as a Protection Against Typhoid Fever, *THE JOURNAL A. M. A.*, Jan. 22, 1916, p. 263.

2. Monthly Bulletin, California State Board of Health, April, 1915.