The Johns Hopkins Hospital,

Baltimore, April 13, 1857.

Dear Dr. Dutro,

The following is, in brief, a description of the leprous nodules in the skin and subcutaneous tissue of the patient at present in Ward I. You already know that cover-slip preparation made by smearing the eburnated tissue from the area on cover slips and stained by Gram's and Judel's methods should show mycobacteria among the characteristic of the 13. lepae.

The sections of the skin and subcutaneous tissue containing the tubercles were stained in haematoxylin and cosine and in Carbol-fuchsin and methylene blue. As regards the first - the tubercles are situated chiefly in the subcutaneous areas and adipose tissues; they are usually discrete and always well-enclosed.
Evidence of reaction were not seen with.

The tubercles are made up of cells of the
epitheloid type, usually with single nuclei,
but a rather unusual number of multi-
nucleated cells are found in certain tubercles.
The great majority of these cells—whether single
or multinucleated—show the localization
marked by Verhoeff. Often the cell protoplasm
is enormously swollen and crammed
with nucleoli. Sometimes these cells
will have suffered partial calcloid degeneration
in the protoplasm. The nucleoli are shaggy cir-
cumcised by the connective tissue in which
they lie, although in the younger and forming
nucleoli elongated autophagic appears to be
going on. There are lacunae separated by
more or less tissue from the original and
older tubercles. Blood-vessels are numerous
in the tubercles.

The behavior of certain of the skin structures
is interesting. Sections of subcutaneous glands
are included in the tubercles and these are
at one time quite normal in appearance and at another rapidly filling up with cells resembling the lymphocytes until finally the structures are lost and they become a part of the tubercle. Some of the gland (multinucleated) cells of the tubercle are derived by confluence from the epithelial lining of these glands. They may also be seen to undergo a typical vacuolization. No arrows from cells are usually seen in the alveolus lined only by bronchial glands. Sebaceous glands were very rarely in the alveolus lined only by bronchial glands. Sebaceous glands were very rarely in the alveolus lined only by bronchial glands. The relation of the actinoma to the lesions are as follows: In the tubercle they are in the usual great numbers. Here seems to me to be no reasonable doubt that they exist in the epithelium and glandular cells surrounding the nuclei of these cells. Whether they also affect at times within the nuclei themselves could not be determined. This case agrees with those studied by a host of others (Vernet, Comel, Innis, etc.) in much as the organisms are found not to invade the epithelial cells of the salivary glands and epidermics. None of these in a tubercle appearance are obtained suggesting a few bacilli in secretory gland, but it is not included that the organism are not in the interstitial tissue between the epithelium of the colon. On the other hand, on the汉堡 of the same the sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers. Here come the outer sheath (Haarke) often contain bacilli in considerable numbers.
and are capable of reaching the surface. On the skin surface the number of bacilli is greatest in the parts where the horny scales are thickest.

The bacilli are found in the smaller blood-vessels in the tubercles. They infiltrate all the coats but exist in greatest numbers in the endothelial cells of the intima, which often are cordsed with them. These vessels are pluriform.

I have not seen in my reading a reference to the occurrence of the bacilli on the surface of the intact skin. I should like to study further the epithelial scales from various parts of the body in order to follow their distribution or, if you prefer it, I shall be glad to assist in the house officer in charge of the case in this study. In any event I shall study mine and fully the behavior of the Chancriform is what I tend to be there.
instance. Perhaps it may be possible to have them this week. The epidemic continues.

Sincerely,

[Signature]

P.S. Cannot be a set of electrical maps yet.

S.F.