page 204, in describing the complications of varus, he gives one case where the patellæ could not be felt distinctly, although the author thought he could detect it.

TREATMENT OF ULCERS BY ELECTRICITY.

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Having alluded incidentally to the local treatment of ulcers by electricity,* it may not be out of place to say a few words generally in regard to the mode in which it should be employed.

Before we begin the treatment, it is well to cleanse the ulcerated surface thoroughly with warm water and soap, and dry with a piece of old linen or soft sponge. We should then apply a disk of platinum, silver, or zinc connected with the positive pole of the battery, directly to the base and sides of the ulcer, closing the circuit by an electrode previously covered with clean linen and well moistened with warm water. The electrode should be applied to the edges and around the ulcer for five or six minutes. After this, we should use for a minute or two longer both poles labile around the sore, to the extent of an inch or more, in order to modify malnutrition and stimulate the enfeebled capillary circulation, as well as to electrolyze the callous and infiltrated tissues surrounding the ulcer, and to promote absorption of the exudations.

Should a case of noma pudendi, cancroid, sloughing ulcer, etc., present itself, I use occasionally as an auxiliary with electricity, a saturated solution of chlorate of potassium, dilute nitric, sulphuric, or hydrochloric acid. I prefer, however, to use the dilute mineral acids. on account of their astringent and chemical properties. I cover the bottom of the ulcer with a little lint, cotton-wool, or granulated sponge, and then wet the sponge with whatever agent the nature of the case may require, and apply the metal disk directly to the saturated material, and while I keep one electrode stationary for a few moments in the ulcer, I work the second conductor slowly around the diseased part. I maintain this mode of treatment daily for a few applications, or until the recuperative process is manifest in the ulcer.

* Part of a paper on the Construction, Use, Mode of Application, etc., of the Galvanic Nipple-Shield.

It is unnecessary for me to give here a detailed account of the electro-chemical changes which take place at each pole when applied to ulcers, especially when using the various remedial agents mentioned. It will be sufficient for my purpose to remark, that if I wish to use a powerful diffusive agent in a nascent state, such as the chloride of zinc, chlorine, oxygen, etc., I have the immediate means at command.

By this method of treatment, aud in some special cases also, the advantages of both electricity and topical medication are combined, and are in direct application to the diseased part, and thus we are furnished with reasons to expect more decided and beneficial results than could be hoped for by a single remedy.

I avoid generally, after local galvanization, all greasy applications to ulcers, and employ as a dressing a little lint, dry or wet with the solution of chlorinated soda, pure or diluted with water. Occasionally, if the ulcer is small and well filled with good, even, healthy granulations, I allow nature to take her course in forming a sound cicatrix. This is done by exposing the ulcer to the oxidizing influence of the air for a short time.

When treating ulcers by the electrolytical method, speedy and better results can be obtained by applying the galvanic current as strong as can be comfortably borne, keeping the poles close to each other for five or six minutes in and around the ulcerated part, and by having a *séance* once or twice a day until there is a decided manifestation of a healing process visible, when every third or fourth day will be sufficient for a sitting.

Should an exuberant growth of granulations spring up in the ulcer, an electrode of silver or platinum connected with the negative pole should be applied directly to the spongy mass, and the circuit closed on the adjacent parts, and then a strong battery current should be employed, but not too powerful to cause pain, until the granulations present a smooth, shrunken, and seared appearance, as if they had been slightly cauterized with a hot iron. After this effect is produced the poles should be reversed, and the *séance* finished with the positive pole in the ulcer for two or three minutes longer.

I have noticed when treating ulcers, particularly open buboes, with the negative pole by means of a metallic conductor in the sore, that the effect of