

apparatus is likely to hold its own in one particular line of real utility—namely, as a source of brush discharges for application in cutaneous affections and as a counter-irritant.

The conditions in which these applications of high frequency have been found useful show a noteworthy similarity to those for which the x-ray tube is employed. Eczema, pruritus, psoriasis, lupus, and even rodent ulcer have all been claimed, with some justice, as deriving benefit from high-frequency applications. The effects of the brush discharge of the static machine are quite analogous. Its acts favourably, though feebly, upon rodent ulcer. Many writers, both ancient and modern, have recorded successes with static discharges in pruritus, in eczema, in the healing of chronic ulcers, and the like. More recently Albert Weil has reported the cure of lupus by static methods and it is highly interesting to note that Cavallo in 1790 related that he had seen great relief afforded in a case of cancer by static discharges.

The similarity of effect produced by these dissimilar electrical treatments is probably of great significance and there is need for much patient work to unravel the problem. It may be that we have to do with a stimulation of the superficial tissues and this would explain the tendency to healing which is shown by many different kinds of ulceration when these are subjected to electrical applications. It is quite as likely that the healing of a rodent ulcer is due to a strengthening of the healthy cells around it as to a destruction of the unhealthy cells which compose it. If so it might help us to understand why small cancerous recurrences in the skin can be caused to disappear, although massive lumps remain unaffected.

Again, the mechanism by which the effects are brought about is not yet clear. In the modes of treatment just considered there are several factors whose influence needs to be taken into account. Thus there are the cathode rays, present wherever any body is negatively electrified to a high degree, the ionisation of the air produced by cathode and x rays, with its tendencies to promote chemical changes, and the ozone and nitrous oxides which are formed around the x ray tubes or electrodes. Any of these may yet prove to be the active agent quite apart from any direct effect of the x rays themselves or of the electric currents set in motion in the tissues.

## Correspondence.

“Audi alteram partem.”

### HEREDITY.

To the Editors of THE LANCET.

SIRS,—I note that Dr. J. Beard is dissatisfied with the discussion which followed the reading of his paper on heredity at the recent meeting of the British Medical Association. I was asked to take part in the discussion and had intended to do so but on receiving an abstract of Dr. Beard's lecture I decided at once to make my excuses and to send a written communication instead. I had no great desire to hear the discussion. The paper, obviously the product of sustained thought and labour, was a deeply interesting one. The writer, a distinguished and original worker, has added a great deal to our previous knowledge of the subject, and on those additions has founded his reasons for differing in various particulars from previous writers. However much we may differ from him there can be no question but that his contentions merit serious consideration. Unfortunately, his paper was rather abstruse. On more than one previous occasion I had attempted to introduce the discussion of subjects a good deal less difficult and knew exactly what would follow Dr. Beard's endeavour—condemnation on irrelevant grounds.

I remember very well the first occasion I appeared before the Psychological Section of the British Medical Association. I sought to demonstrate that characters acquired by intemperate parents are not transmitted to offspring. I was told I was wrong; that if a man got drunk on his bridal night the subsequent embrace would result in an abnormal child; that if eggs be submitted to the fumes of alcohol the chickens are abnormal, and so forth. I have been wondering

ever since on what data the statement concerning the too festive bridegrooms was founded, and what the experiment on eggs had to do with heredity. Then, again, in another paper I took wider ground and sought to prove that no acquirements are transmissible. But my principal opponent insisted that since all old characters must have begun as new characters, and since new characters are acquirements, therefore it must follow that acquirements are transmissible. This simple and ingenious line of reasoning had not occurred to me but it appeared to commend itself to the meeting. I tried in vain to explain that new characters are not necessarily acquirements.

The mischief in these discussions appears to lie, not in the fact that men differ in their opinions, but that they differ as to what constitutes evidence. For example, last year I read a paper in which I sought to demonstrate that parental disease and inebriety do not affect offspring subsequently born. I gave my reasons at elaborate length. Dr. W. Lloyd Andriezen replied that he had seen hundreds of instances of the thing I denied. Dr. A. T. Schofield announced, with flattering confidence in my intelligence, that an hour's conversation with him would convince me of the error of my ways. The latter gentleman was so shocked at the wickedness of my views that he greatly deplored the fact that they were given to the world weighted with the great authority that attaches to a paper read before the Psychological Section of the British Medical Association. The readers of THE LANCET may remember how desperately I tried to extract their data from these gentlemen and how completely I failed. I imagine Dr. Beard's failure will be as complete.

I have really no desire to appear too exacting, but unless these medical discussions of heredity are conducted in the future by a method very different from that which finds favour at present the profession will certainly continue to believe that the subject consists mainly of “philosophic froth.”

I am, Sirs, yours faithfully,

Southsea, August 28th, 1904.

G. ARCHDALL REID.

## THE INSUFFICIENT NUMBER OF LADY FACTORY INSPECTORS.

To the Editors of THE LANCET.

SIRS,—There are 16½ millions of workpeople in our island whose health interests are superintended by the Home Office through the agency of 152 male and 12 lady inspectors. On the Home Office vote being considered in the House on August 4th it was stated that during last year the total number of fatal accidents connected with British industry was 4622 and the number of accidents 112,000. No wonder there was a just demand for increase in the number of factory inspectors and more especially of lady inspectors. Mr. John Burns proved the champion of the army of women employed in dressmaking establishments when he stated that customers of these establishments did not know how the British hussies with foreign names were wearing out the lives of British girls and preventing them from becoming the mothers of strong, healthy, and numerous families. Consider this point in connexion with the present cry about the physical deterioration of those wishing to enter the army—for the matter is well worth the attention of the medical profession. How can a virile race be expected so long as married women are allowed to work in factories and workshops, ruining their own health and sapping the physique of their offspring? The other day we had a play written by the wife of the Colonial Secretary—a satire upon the fashionable dressmaker and her establishment, showing that the old pathetic story of Tom Hood's “Song of the Shirt” is as true now as it was when written. The epilogue of Mrs. Lyttelton's play was spoken in the House of Commons by the Member for Battersea when he said, “Let the ladies of Belgravia understand that the women who make their dresses for Ascot and for the Court are at the same time making their own shrouds.” Knowledge may penetrate in this way even into the most fashionable quarters. It is not enough. We must do more: let us suppress the possibility of such practices. One of the means to this end undoubtedly will be better inspection by an increased number of lady inspectors. The Home Office is known to be sympathetic, but let us recall an old Greek proverb about lions and asses. An army of