sittings held at intervals of from four to eight weeks. Should this after-treatment be neglected, the hair at the depilated places will in by far the majority of cases begin to grow again in about two and a-half months. Only in some cases did the first treatment suffice to accomplish a radical cure.

I would here call attention to the fact that the results of the ingenious Finsen method of treatment by light correspond to those obtained with Roentgen rays, as far as regards lupus. It should, however, be noted that the Finsen treatment seems suitable only for smaller lupus patches, whereas for large areas the Roentgen treatment is preferable.

When we consider what progress towards the well-being of humanity still lies in store from the discovery of the x rays, we may congratulate our century on such an achievement, and must not refuse the meed of our admiration for the man to whom we owe it.

TREATMENT OF LUPUS BY THE X RAYS.

By ROBERT ERNEST SCHOLEFIELD, M.A., M.B. OXON,
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[SEE SPECIAL PLATE.]

IN connection with the interesting account of phototherapy as conducted by Professor Finsen, of Copenhagen, which was given in the *BRITISH MEDICAL JOURNAL* of September 30th, 1899, it will be of interest to some of your readers to observe from untouched photographs what effect may be obtained in the treatment of a serious and disfiguring form of disease—namely, lupus—by the action of the x rays. The result of surgical interference with such cases has been uniformly disappointing, not only in often intensifying the virulence of the growth but in the destruction of the parts which are the seat of the same, and, in the case of the nose—which was affected in my patient—productive of a hideous deformity, which the greatest skill in plastic operations, even if the disease has been completely removed, suffices barely to make presentable.

When the patient, from whom the photographs were taken, came under my care, the disease was so extensive that, before submitting him to any surgical interference, I decided to try the effect of the rays, of whose efficacy I had read in the annals of the Roentgen Society. With great kindness my friend, Mr. William Webster, F.C.S., who possesses a most excellent apparatus of extreme power, offered to carry out the details of the treatment, and it is also to his skill that the excellent photographs are due.

The history of the patient is as follows:

B. H. A., aged 18, first noticed the affection of the nose in September, 1897. He then underwent various kinds of treatment, in which the nose was submitted to the action of ointments, powders, douches, etc.; and even on one occasion in December, 1898, a slight scraping or scarification was undertaken, luckily of a very superficial kind, otherwise a great loss of tissue would, I think, have inevitably followed. For some months before I saw him he had, under the advice of a medical man, been poulticing it, but the disease had steadily advanced from the tip of the nose, where it was first noticed, till both alæ and the bridge were affected, and isolated nodules were to be noticed almost as high as both inner canthi, though they hardly show in the Skiagraph No. 1.

On June 30th he was first exposed to the rays from a Jackson high vacuum tube attached to a Newton-App's coil giving an 18-inch spark, a hammer break of ordinary kind being employed. An important condition in the tube was aimed at—namely, the so-called "sun effect" first described by Webster in October, 1896, at his demonstration at the Royal Artillery Institute. The rays, under this condition, are capable of taking a photograph of the bones of the hand in a fraction of a second, or of penetrating a $\frac{1}{4}$ -inch steel plate in ten to fifteen minutes' exposure. The face, other than the affected area, was protected by a rubber mask of some thickness, and exposed to the rays for ten minutes at each sitting at about 5 in. to 6 in. distance from the tube. Sittings were given every other day throughout August, and it was noticed that the exposed skin dried into a scaly condition and peeled off, the lupoid area, where thickest, forming a kind of scab, as shown in Skiagraph No. 2.

On September 1st, 1899, the patient informed us that the night sweats, which for some months had been profuse, were much alleviated, and though no treatment was undertaken in September, by October 9th they were reported to have quite ceased and have not reappeared up to the present. There are now no signs of disease in the lungs, though I regret that I did not examine them before treatment was commenced. On October 9th hardly any trace of lupus was to be found, but as a few pinkish or brownish nodules were to be seen high up on the nose he was exposed on alternate days up to November 12th when the final skiagraph, No. 4, was taken.

The peeling of the skin as in severe sunburn is well shown in Skiagraph No. 3, and the retraction of this hardened layer produced slight ectropion

and epiphora as shown in that skiagraph also. From this he has recovered since.

These results are sufficiently startling in their similarity to those produced by Professor Finsen to make one wonder whether the rays from the tube and the ultra-violet or photochemical rays of the solar spectrum and the electric light may not be identical.

Still further, the most important element is the penetrative power of the x rays, and the conclusion cannot but be drawn from this case that if dermal tuberculosis may be cured, why not pulmonary. Nay, further, may we not take the relief of profuse night sweats as an indication of some such effect? May we not then hope to go even a step further than the fresh-air treatment towards the cure of phthisis and supplement it with either concentrated sunlight or exposure to concentrated x rays?

AN EXAMPLE OF THE USE OF THE X RAYS IN THE EXAMINATION OF ENLARGED METATARSO-PHALANGEAL JOINTS.

By GEO. H. RODMAN, M.D.,
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SKIAGRAPHS of the two following cases were shown at a recent meeting of the Thames Valley Branch of the British Medical Association, and, at the request of Mr. Edmund Owen, who expressed great interest in the pathological condition therein found, are published.

The abnormal processes of bone, for such they appear to be when photographed by means of the Roentgen rays, were in both cases unexpected, and, as far as I have been able to discover, have not been described previously. Whether the gouty diathesis, which appears to be common to the two cases, is more than a coincidence and in any way productive of the outgrowths, I am unable at present to state, but I trust that, with the light of future investigation of similarly enlarged joints, we may be able to arrive at some more definite conclusion as to the causation and frequency of the condition. The similarity in their shape and of the position from which these processes spring is a striking feature. Radiographs of the corresponding joints in hands, crippled by gouty enlargement, do not apparently show bony outgrowths of a like character.

Fig. 1.

CASE 1.—The skiagraph in this case shows what appears to be an exostosis growing from the outer aspect of the head of

FIG. 1.

FIG. 2.

FIG. 3.

FIG. 4.

TO ILLUSTRATE MR. R. E. SCHOLEFIELD'S PAPER.