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,
Blackheath, S.E.

[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.,
East Sheen.

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

first metatarsal bone. The patient was a gentleman aged 38, who had for several years suffered from enlargement of the first metatarso-phalangeal joint, which, from time to time, is the seat of pain of a burning character. This patient had never had an attack of typical gout, but had a strong family taint of that disease from his maternal grandfather. Periodically the joint has become red and more swollen, and when thus affected locomotion has been attended by considerable discomfort. The displacement inwards of the phalanges of the three outer toes is probably produced by a peculiar gait caused by efforts to save, as far as possible, the weight of the body being thrown upon the enlarged joint.

Fig. 2.

CASE II.—This is a case of hallux valgus, with what seems to be an exostosis similar in shape to that shown in the skiagraph from the first case. In this instance the radiograph was obtained from a gentleman aged 70, who has had several typical gouty attacks in the first metatarso-phalangeal joint—an outgrowth of like density, shape, and seat of insertion is seen to be springing from the inner side of the head of the second metatarsal bone, and by its extremity closely approaches the extremity of the growth on the adjoining toe.

MEMORANDA :

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

ROETHELN.

To school medical officers are frequently afforded very favourable opportunities for observing the symptoms of infectious ailments from their earliest inception, as, when a case occurs in school, it is all-important in order to prevent an epidemic, that a careful individual scrutiny of the pupils be made daily. An intelligent and observant housekeeper is, in such circumstances, an invaluable aid to the medical officer as she isolates a "suspect" at once for examination by him.

Two points in connection with rtheln had in several epidemics struck and interested me, and I was on the look out for an opportunity to verify or qualify my previous observations. The first was the possibility of recognising the primary invasion of the system; the other, alluded to but not, I think, made enough of in text-books, the importance of the glandular involvement for diagnostic purposes.

In a large girls' school of which I have the medical supervision, an epidemic of rtheln occurred recently. On the

appearance of the first case all the girls were cautioned to report themselves if indisposed in any way. Eight out of the 50 who were ultimately attacked presented themselves, complaining of slight headache, and the temperature was found to be from 0.5 to 1.0 F. above normal; on the neck and chest there was more or less distinct subcutaneous mottling, morbillary in character. Each of these girls was isolated and kept under observation for four days, but as the symptoms were found to disappear I did not consider that I was justified in detaining them longer from school, and they accordingly returned to work. But on the fourteenth to sixteenth day—counting from that on which I had first seen them—I found them again isolated for my inspection, and now the developed symptoms of rtheln were evident. It seems to me that such cases go to show that on the first invasion by the poison an impression is made sufficient to cause the symptoms noted, and that during the subsequent "incubation" period they disappear, until the maturation process is complete.

At this later stage, in practically every case of this epidemic, glandular involvement was pronounced and unmistakable, the mastoid, posterior cervical, and occipital regions being affected, all, one or other. Glandular swelling and tenderness generally preceded the "rash" by a few days, and so characteristic did I come to look upon these symptoms that in several cases presenting no other quarantine was imposed, with the result that in all of them a development of the disease occurred within the next two, three, or four days.

As rtheln, like true measles, is an ailment in which infection is strongest at the outset, both the points to which I have alluded are of practical value when there is reason to fear an outbreak, as attention to them may greatly assist in stamping out an epidemic.

St. Andrews.

JOHN WILSON MOIR, M.D.

THE TREATMENT OF PNEUMONIA.

As it would appear that the treatment of this affection has been considered by many members of the profession a *qustio vexata*, I thought it might prove instructive to give a brief outline of what has proved in my hands a very successful course of procedure in several severe cases during the present and late epidemics of influenza in which inflammation of the lungs has been so often a fatal complication.

During the initial congestive stage a combination of quinine and hydrarg. c. cret, and concurrently liquid ext. of ergot, the latter in 20-minim doses, was regularly administered. The ergot seems to cause contraction of the capillaries of the lung and promote resolution. During the second or exudative stage, when the expectoration was profuse and deeply sanguineous, a mixture containing digitalis, tr. ferri perchloridi, quinine, and dilute hydrochloric acid was given at regular intervals with the most happy results. If the case were asthenic small quantities of stimulant were also given at intervals. The digitalis and quinine acted as antipyretics, controlled the engorgement of the lungs, and limited the amount of sputa. The hydrochloric acid and iron are valuable constructives, and their administration need not be held to be contra-indicated even by the fur-coated condition of the tongue, which soon disappears on defervescence taking place.

J. LATCHFORD, M.B.,

Bodmin.

Lieutenant-Colonel, R.A.M.C.

AMPUTATION WITHOUT ANSTHESIA.

I REMEMBER about twenty-six years ago, when I was acting as an assistant to Dr. Davis, Bryngolwg, Aberdare, a man, about 65 years of age, having his hand and forearm chopped off by a chaffcutter worked by steam, up to within an inch of the elbow-joint. After being extricated, he walked a distance of about a mile to the surgery, the arm in the meantime having been tightly bandaged above the elbow. He refused to be carried to his home (another good mile), which distance he walked. When submitting himself to have his arm taken off above the elbow, he refused point blank to have any chloroform. He went on the table unaided, put himself in position, and held out his arm to be operated on. Whilst the old doctor was operating he never winced nor uttered a murmur.

Old Colwyn, North Wales.

PRICE MORRIS, L.R.C.P.E.