and diameter of red corpuscles), on the common physical signs of pernicious anaemia, and on the good results of liver therapy. Nevertheless not all these cases have the convincing features of true pernicious anaemia, and it would be preferable to speak of macrocytic anaemia. This condition may be due to two causes: first, it may be a lack of intrinsic factor as found in a typical case of pernicious anaemia; secondly, it may be that owing to artificial interference with the flow of the intestinal contents the extrinsic and the intrinsic factor are unable to unite and be absorbed in the normal manner.

Our thanks are due to the late Dr. Alexander Goodall for his permission to record these cases.

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Medical Memoranda

A Case of X-ray Dermatitis

We think the following case should be given wide publicity to avoid a repetition of the catastrophes of the early days of radiology. Since the outbreak of war many new x-ray machines have been installed and operated by untrained or inexperienced persons who are ignorant of the dangers to which they are exposed. There is also an increasing tendency for orthopaedic surgeons to reduce fractures under screen control, either operating the apparatus themselves or permitting some untrained member of the theatre staff to do so. The case quoted shows that such

proximal phalanges. This progressed to blistering, followed by desquamation and loss of the nails. Healing took place in three or four months, but several sets of nails developed only partially before a permanent set resulted.

In March, 1941, the left fourth digit became reddened and oedematous, and in June an ulcer developed. On examination there was marked oedema of the finger. It showed general reddening and there was an ulcer near the base of the nail on the ulnar side. The ulcer was about the size of a sixpence and

Photograph of x-ray dermatitis. Taken by ultra-violet light.

proceedings are not without risk and may be followed by serious, even disastrous, consequences. The proper method of screen examination as practised by radiologists entails a minimal exposure of the hands, and there is no risk to the operator. The enormous number of screen examinations performed daily by radiologists all over the country for many years without untoward result is conclusive proof of the safety of the proper method.

CASE REPORT

A doctor aged 26 recently consulted us about treatment for x-ray dermatitis which he had contracted over a year ago at a hospital in another district. In April, 1940, he began reducing fractures under screen control, averaging one daily. Soreness gradually developed in the fingers of the left hand and by June, 1940, there was a well-developed erythema affecting the dorsal surfaces of all four fingers as far down as the middle of the

is continuing to spread. Constant severe pain was present, radiating up the ulnar nerve and requiring drugs to produce sleep. The skin of the other fingers was thin, dry, and delicate, with many small reddish-brown subcutaneous areas. The nails were normally formed, but thin and brittle. The left thumb and right hand appeared normal.

Photographs were taken by artificial light, ultra-violet light, and infra-red light by Mr. C. H. Edlin of Nottingham, to whom our thanks are due. The ulcer is clearly seen and the subcutaneous spots are particularly well shown on the ultra-violet photograph, appearing as black spots (see Fig.). We were rather surprised that the infra-red photograph gave much less information than the other two.

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