

tection, making examinations with the fluoroscope and doing therapeutic work, may count himself fortunate if he escapes unscathed. The dermatitis may be of three grades, simple, mild, or severe.

In the simple grade the skin is chapped, swollen and gathered into thickened folds across the knuckles. Stiffness exists, but sensibility is unimpaired. In the mild grade bleb-formation takes place and hemorrhagic-like points and shots appear in the skin and gradually work to the surface. The nails become affected through want of nutrition, they get brittle and longitudinal striae appear upon them with cleavage between them in some parts. They get very thin later on and double up, and break under the least strain. In this condition they cause a great deal of inconvenience. If exfoliation takes place they reappear again in a modified form and but little, if any, permanent injury results to any parts affected. In the severe form there is exfoliation of the epidermis and nails, and deep ulceration takes place affecting the sheaths of the tendons. The nails are permanently destroyed and the joints damaged so that amputation may be necessary to limit the gangrene that ensues. I have experienced the mild grade myself and have seen all the varieties mentioned. This dermatitis is not confined to the hands only, it may affect the face, including the eyes, conjunctivæ, the shoulders, breast, or other parts.

The other three classes resemble burns of the first, second and third degree and result from one or more exposures at short intervals for skiagraphs, fluoroscopic examinations, or treatments for therapeutic purposes. They do not differ in their essentials from the three grades outlined above as usually affecting the hands of X-ray workers. In those of the first degree there is a transient erythema resembling a sunburn, followed by a slight exfoliation with hyperesthesia, accompanied by a sensation of warmth or burning, but no real pain. If hairy portions of the body are exposed there is depilation without signs of inflammation. In those of the second degree blisters follow or coincide with the erythema, which develops a very dark shade. This is a superficial gangrene. The blebs may or may not become purulent. It closely resembles a scald, but is less acute in character and often much slower in healing. Irritating treatment may drive it into a burn of the next or third degree. In this class a leathery slough appears involving the deeper layers of the skin and subcutaneous tissues. Unlike those of the second degree, they do not clear up in three or four weeks. They resist treatment in a remarkable manner and go on to deep ulceration of the underlying structures. Their stubbornness to recovery