being that to-day phototherapy and radiotherapy are admittedly the most potent means at our disposal for combating and conquering a most distressing condition.

Each method has its advocates. In America, radiotherapy has claimed the allegiance of the greater number of investigators, probably due to the fact that nowhere has the static machine reached such perfection of development and use as here, and nowhere has more enthusiastic admirers, and for the possessor of such a machine the necessary X-ray apparatus involves but comparatively slight additional outlay, while the Finsen light is an expensive luxury, occupying much space and demanding more valuable time than the average practitioner can afford to give it.

Many very ingenious devices have been resorted to in the endeavor to overcome the difficulties which militate so seriously against the popularity of phototherapy. A form of apparatus which I have found of much service in many cases is a condenser spark lamp, with iron electrodes, known as "The Ultra." It is used with the alternating current drawn from an ordinary incandescent lamp socket. The diminutive arc of this lamp emits comparatively few light rays, but is very rich in violet and ultra-violet rays, as may readily be demonstrated. Being richer in the ultra-violet rays than the Finsen light, it is more powerfully and more rapidly bactericidal, and thus the time of exposure is materially lessened, so that from three to ten minutes only is required, instead of the half-hour, hour or more of the Finsen lamp.

While the ultra-violet rays emitted by the iron electrode arc are of shorter wave length, more refrangible, and not so penetrating as the rays of greater wave length—the longer ultra-violet, violet and blue of the large Finsen lamps—yet they have a wide field of usefulness in lupus, and my remarks upon phototherapy will refer to this branch of the subject alone, demonstrating some of its possibilities.

The treatment of lupus vulgaris in its more aggravated forms is far from a simple process; many considerations are involved and much of the success will depend upon the skill, resourcefulness and patience of the operator, not to mention the faith and perseverance of the patient. Fixed rules cannot be laid down, and yet there are certain preliminaries and adjuvants to treatment, attention to which may be of very material assistance, and these apply to both photo and radiotherapy.

The production of artificial fluorescence of the tissues by administering some fluorescing substance before raying, as elaborated by Morton, is an undoubted advantage. From five to ten grains of bisulphate of quinine may be given one hour before each raying for this purpose. Many other substances may be similarly employed—fluorescin and others.