length limit to the sensitivity of photographic materials is at about 13,500 A. Some of the many difficulties that seem to make further progress difficult are pointed out.

There are five methods of photography in the infrared, two direct and three indirect. The first direct method is the sensitive plate; the second makes use of the Herschel effect, which is that exposure to infrared radiation destroys the effect of previous exposures to shorter wave lengths. The first indirect method depends upon the heating and vaporizing of specially prepared materials; the second makes use of the quenching of the phosphorescence of certain phosphors by infrared radiation; and the basis of the third method is the electron image tube. Probably the present-day limit to the photographic recording by infrared is at about 20,000 A.

Sources of infrared radiation, with characteristic data, are well taken care of in Chapter 7.

The next three chapters are devoted to an examination and differentiation of different materials by infrared photography. This material covers textiles, documents, art works, biological specimens, wood, coal, and botanical specimens.

Chapter 11 is devoted, with many illustrations, to infrared photomicrography. The advantages of the use of the longer wave length are many.

The special applications of this kind of photography are given, again with many illustrations. Pictures taken by the radiation from a hot electric iron are shown, as well as those of audiences taken by infrared radiation without the subjects' knowledge.

Advantage can be taken of the different properties of materials to detect camouflage by the use of infrared photography. Chapters 14, 15, and 16 are devoted to the general characteristics of infrared radiation with respect to its penetration of the atmosphere, dust, smoke, haze, and fog. The optical characteristics of materials with respect to infrared radiation differ in many instances from like characteristics for the shorter-wave-length radiation of the visible spectrum.

The book contains a very complete bibliography and index. The only criticism that can be offered is to express regret that the established nomenclature of the American Standards Association has not been followed.

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