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Author has also described techniques requiring a minimum of special equipment but which yield unusual and interesting results. These include photography of fish in aquaria, insects, glassware and crystals. Two very special techniques enable the photographer to produce effects which simulate water colors or oil paintings. These two techniques have never before been described and illustrated in a book. Despite their technological sophistication, modern films have certain limitations, so the author have shown how the photographer must often make allowances to ensure that his pictures are reasonably faithful to the original subject—although sometimes these same limitations can actually be exploited for creative effect.

The subject of natural history photography makes use of almost all of the techniques described in this book. By virtue of the subject, which covers all natural and living things in many different environments, it is impossible to deal with each individual situation in a book of this size. However, an attempt has been made to describe techniques for the photography of the more popular subjects. Underwater photography is one of the most demanding fields that the photographer can attempt. It requires considerable physical effort combined with mental agility in an environment that is cold, wet and often with a clarity that is far from ideal. Success comes only with understanding the limitations of one's equipment and adherence to the few basic rules.

Flash equipment is discussed in considerable detail. In addition to explanations of fill-in and multiple flash techniques, details are provided of any necessary calculations. A special feature is construction details for a flash delay unit which enables certain high-speed events to be photographed at various stages of the action. Its use is illustrated by a sequence showing an ink drop falling into water. The author has described the various methods and equipment for close-up photography with details of relevant calculations. The chapter on photomicrography discusses the practical aspects of photography through the microscope and of the special illumination required. The microscope described is a relatively simple and inexpensive type found in most schools.

Photomicrography - photography with the aid of the compound microscope - is a very specialized field of photography, for which extremely expensive equipment is available, and cannot be fully explored in a book of this nature. It is possible, however to give sufficient information to enable the reader who has access to a microscope of fairly good quality, such as those to be found in most school science laboratories, to produce photomicrographs of a reasonable quality using a general-purpose camera of either fixed lens or interchangeable lens type. The reader who experiments with the basic techniques described in the book and discovers that they wish to delve deeper may than refer to one or more of the several books available dealing specifically with the subject. Despite this attention to technique, the author has not neglected the basics. The opening chapters discuss the nature of light and all the principal features and main types of cameras and films. The author has looked at the various types of exposure meters and discussed their use, and has dealt with depth of field and related focusing calculations. Also the author has explained the all-important requirements for the control of camera movement and subject movement.

Photography is all things to all photographers, whether it is used for holiday pictures of the family or as a fully creative art form in its own right. Whatever the reader aspirations as a photographer, the author feel that an understanding of techniques is needed before the reader can truly apply themselves to taking the pictures they want. The author has attempted to explain and illustrate these techniques in as interesting and stimulating a way as possible.