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Information Section
Bureau of Standards, Washington

PUBLICATIONS OF THE
DEPARTMENT OF COMMERCE
BUREAU OF STANDARDS
OPTICAL INSTRUMENTS SECTION

dealing with

OPTICAL INSTRUMENTS,

REFRACTOMETRY

and

OPTICAL GLASS

Letter Circular No.283

June 23, 1930

The articles in the following list which have been published by the government may be consulted in the various Government depository libraries of which there are two or more in each state. Publications starred thus (*) are no longer available for distribution or sale. Copies of the other government publications may be purchased from the Office of the Superintendent of Documents, Government Printing Office, Washington, D. C., at the prices quoted.

In general, reprints of the articles which have appeared in scientific periodicals, other than those of the government, are not available for distribution. Many of the larger libraries maintain files of these scientific journals and these may be readily consulted. If your local library does not have such files available it may be able to borrow a desired publication from a large library for your use. Inquiries regarding the purchase of back numbers of magazines containing any of the articles listed below should be addressed to the publishers. For this purpose the following list of their addresses is given:

Annual Report of Compressed Gas Manufacturers Ass'n., Inc.,
Compressed Gas Manufacturers Ass'n., Inc.,
120 West Forty-second St.,
New York, N. Y.

Army Ordnance,
The Mills Building,
17th St. and Pennsylvania Ave.,
Washington, D. C.

Astronomical Society of the Pacific,
C.H. Adams, Secretary,
803 Merchants Exchange Bldg.,
San Francisco, Calif.

Journal of the Optical Society of America
and Review of Scientific Instruments,
F.K. Richtmyer, Managing Editor,
Cornell University,
Ithaca, N. Y.

The Military Engineer,
The Mills Building,
17th St. and Pennsylvania Ave.,
Washington, D. C.

The Resolving Power of Objectives.

P.G.Nutting.

Bulletin of the Bureau of Standards, Vol.6, pp.121-124, 1909-1910.

Reprint No.122, 5 cents.

*The Testing and Properties of Optical Instruments.

First Edition, 1910.

Scientific Circulars of the Bureau of Standards, No.27.

Compound Lens Systems.

T.Townsend Smith.

Journal of the Optical Society of America, Vol.1, pp.113-119, 1917.

Axial Aberrations of Lenses.

E.D.Tillyer and H.I.Shultz.

Bulletin of the Bureau of Standards, Vol.14, pp.341-369, 1918-1919.

Scientific Papers of the Bureau of Standards, No.311.
5 cents.

The Properties and Testing of Optical Instruments.

Second Edition, 1918.

Scientific Circulars of the Bureau of Standards, No.27.
10 cents.

Optical Conditions Accompanying the Striae which Appear as Imperfections in Optical Glass.

A.A.Michelson.

Scientific Papers of the Bureau of Standards (No.333),
Vol.15, pp.41-45; 1919-1920. 5 cents.

Optical Glass.

Heber D.Curtis.

Publications, Astronomical Society of the Pacific, Vol.31,
pp.77-86; 1919.

Apparatus for the Testing of Binocular Telescopes.

T.Townsend Smith.

Journal of the Optical Society of America, Vols.2-3,
pp.76-90; 1919.

Characteristics of Striae in Optical Glass.

T.T.Smith, A.H.Bennett and G.E.Merritt.

Scientific Papers of the Bureau of Standards (No.373),
Vol.16, pp.75-91; 1920. 5 cents.

The first part of the document discusses the general principles of the proposed system. It is intended to provide a comprehensive overview of the various aspects involved in its implementation. The following sections will detail the specific components and their interrelationships.

The second part of the document focuses on the technical details of the system. This includes a description of the hardware and software components, as well as the methods used for data collection and analysis. The goal is to ensure that the system is both reliable and efficient in its operation.

The third part of the document addresses the practical application of the system. It outlines the steps required for installation and the procedures for ongoing maintenance. This section is crucial for ensuring that the system is used correctly and that any issues are promptly addressed.

The fourth part of the document provides a summary of the findings and conclusions drawn from the study. It highlights the key benefits of the system and offers recommendations for further research and development. The authors believe that this system has the potential to significantly improve the efficiency and accuracy of the processes it is designed to manage.

In conclusion, the proposed system represents a significant advancement in the field of data management and analysis. Its implementation is expected to lead to more informed decision-making and improved operational performance. The authors are confident that the system will be a valuable asset to any organization that adopts it.

- The Cemented Telescope Objective of Barium Crown and Flint.
I.C.Gardner.
Journal of the Optical Society of America, Vol.4, pp.275-283; 1920.
- Specifications for Marine Sextants.
Scientific Circulars of the Bureau of Standards, No.110, pp.1-8; 1921. 5 cents.
- Spherical Aberrations of Thin Lenses.
T.Townsend Smith.
Scientific Papers of the Bureau of Standards (No.461), Vol.18, pp.559-584; 1922-1923. 10 cents.
- The Standardization of Optical Fire Control Instruments.
I.C.Gardner.
Army Ordnance, Vol.5, pp.512-514; 1924.
- Aberrations of Long Focus Anastigmatic Photographic Objectives.
A.H.Bennett.
Scientific Papers of the Bureau of Standards (No.494), Vol.19, pp.587-640; 1923-1924. 20 cents.
- Image Curvature as a Function of Diaphragm Position.
I.C.Gardner and J.J.Arnaud.
Journal of the Optical Society of America and Review of Scientific Instruments, Vol.9, pp.675-683; 1924.
- A Magnifying Stereoscope and Camera Lucida; Two Instruments for Airplane Mapping.
I.C.Gardner.
Journal of the Optical Society of America and Review of Scientific Instruments, Vol.11, pp.195-198; 1925.
- A Modified Hartmann Test Based on Interference.
I.C.Gardner and A.H.Bennett.
Journal of the Optical Society of America and Review of Scientific Instruments, Vol.11, pp.441-449; 1926
- A Camera for Photographing the Interior of a Rifle Barrel.
I.C.Gardner and F.A.Case.
Journal of Optical Society of America and Review of Scientific Instruments, Vol.12, pp.159-164; 1926.
- An Optical System for Reading the Angular Deflection of a Mirror.
I.C.Gardner.
Journal of the Optical Society of America and Review of Scientific Instruments, Vol.12, pp.529-536; 1926.

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Photographing the Bore of a Rifle.

I.C.Gardner.

The Military Engineer, Vol.18, pp.480-481; 1926.

Optical Methods for Testing Compressed Gas Containers.

I.C.Gardner.

Fourteenth Annual Report, 1926, Compressed Gas Manufacturers' Assn., Inc., pp.24-31.

The Distortion of Some Typical Photographic Objectives.

A.H.Bennett.

Journal of the Optical Society of America and Review of Scientific Instruments, Vol.14, pp.235-244; 1927.

The Compensation of Distortion in Objectives for Airplane Photography.

I.C.Gardner and A.H.Bennett.

Journal of the Optical Society of America and Review of Scientific Instruments, Vol.14, pp.245-250; 1927.

Application of the Algebraic Aberration Equations to Optical Design.

I.C.Gardner.

Scientific Papers of the Bureau of Standards (No.550), Vol.22, pp.73-203; 1927-1928. 45 cents.

Cause and Removal of Certain Heterogeneities in Glass.

L.W.Tilton, A.N.Finn, and A.Q.Tool.

Scientific Papers of the Bureau of Standards (No.572), Vol.22, pp.719-736; 1927-1928. 10 cents.

An Interference Method for Determination of Axial and Oblique Aberrations.

A.H.Bennett.

Bureau of Standards Journal of Research (Research paper No.52), Vol.2, pp.685-702; 1929. 10 cents.

Prism Refractometry and Certain Goniometrical Requirements for Precision.

L.W.Tilton.

Bureau of Standards Journal of Research (Research Paper No.64), Vol.2, pp.909-930; 1929. 10 cents.

1. Introduction

The purpose of this study is to investigate the effects of various factors on the performance of a system.

The study is organized as follows: Section 2 describes the methodology used in the study.

Section 3 presents the results of the study, and Section 4 discusses the implications of the findings.

Finally, Section 5 concludes the study and provides recommendations for future research.

The study is based on a series of experiments conducted over a period of six months.

The results of the study are presented in the following sections.

The first section of the study is a literature review of the topic.

The second section of the study is a description of the methodology used in the study.

The third section of the study is a presentation of the results of the study.

The fourth section of the study is a discussion of the implications of the findings.

The fifth section of the study is a conclusion and recommendations for future research.

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The third section of the study is a presentation of the results of the study.

Section 2. Methodology

The methodology used in this study is based on a series of experiments.

The first experiment was designed to investigate the effects of factor X on the system.

The second experiment was designed to investigate the effects of factor Y on the system.

The third experiment was designed to investigate the effects of factor Z on the system.

The fourth experiment was designed to investigate the effects of factor W on the system.

The fifth experiment was designed to investigate the effects of factor V on the system.

The sixth experiment was designed to investigate the effects of factor U on the system.

The seventh experiment was designed to investigate the effects of factor T on the system.

The eighth experiment was designed to investigate the effects of factor S on the system.

The ninth experiment was designed to investigate the effects of factor R on the system.

The tenth experiment was designed to investigate the effects of factor Q on the system.

The eleventh experiment was designed to investigate the effects of factor P on the system.

The twelfth experiment was designed to investigate the effects of factor O on the system.

The thirteenth experiment was designed to investigate the effects of factor N on the system.

The fourteenth experiment was designed to investigate the effects of factor M on the system.

The fifteenth experiment was designed to investigate the effects of factor L on the system.

The sixteenth experiment was designed to investigate the effects of factor K on the system.

The seventeenth experiment was designed to investigate the effects of factor J on the system.

The eighteenth experiment was designed to investigate the effects of factor I on the system.

The nineteenth experiment was designed to investigate the effects of factor H on the system.

The twentieth experiment was designed to investigate the effects of factor G on the system.

Representation of Aberration Diffraction Effects by means
of Rotating Sectors.

A.H.Bennett.

Bureau of Standards Journal of Research (Research Paper
No.102), Vol.3, pp.391-398; 1929. 10 cents.

Optical Heterogeneity of a Fused Quartz Disc.

L.W.Tilton and A.Q.Tool.

Bureau of Standards Journal of Research (Research Paper
No.112), Vol.3, pp.619-628; 1929. 5 cents.

