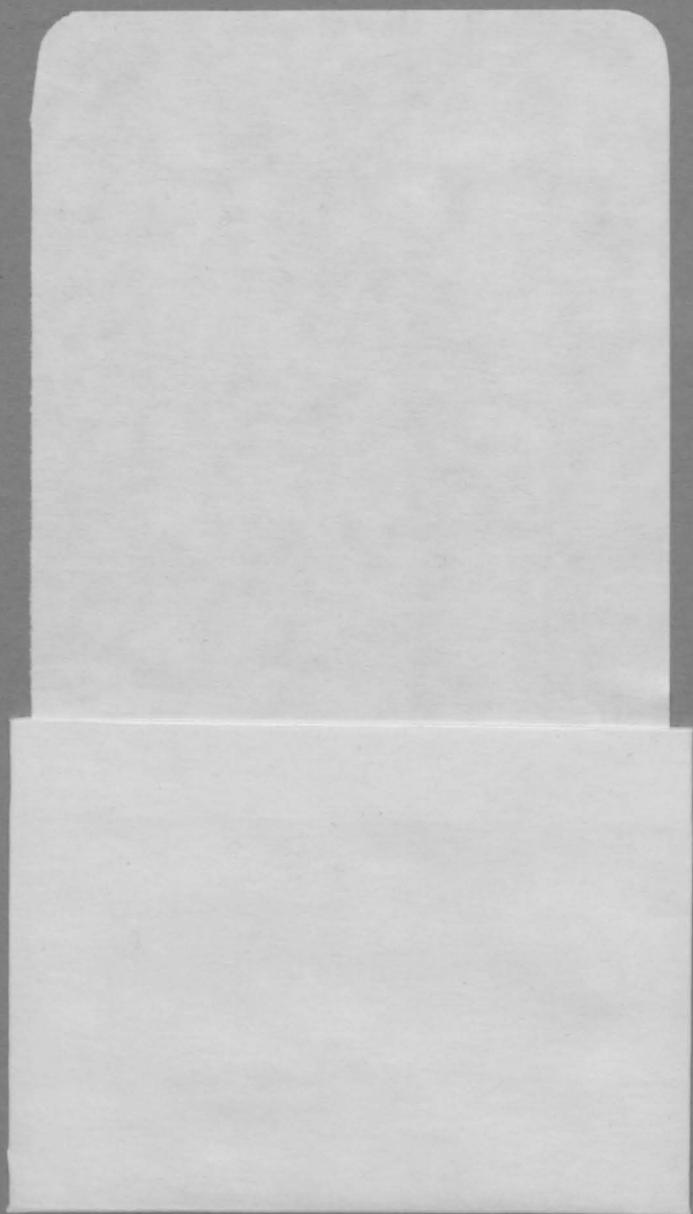


MECHANICAL MODELS

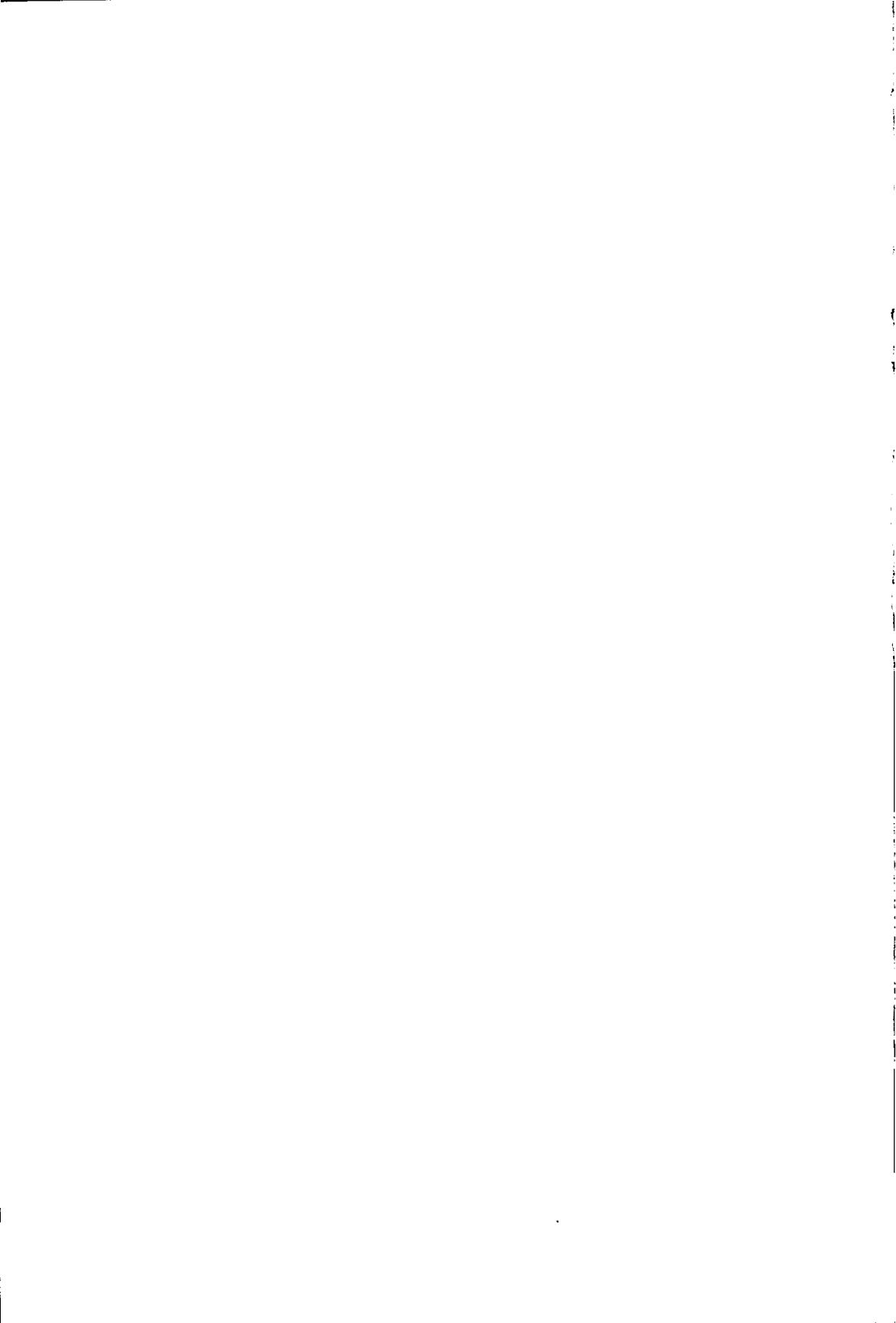
Dana
606
N42





MECHANICAL MODELS

**Given to the Newark Museum
by Louis Bamberger and Exhibited
May-October, 1930**



MECHANICAL MODELS

**A Series of Working Models
on the
Art and Science of Mechanics**

**The Newark Museum
Newark, N. J.
1930**

THE NEWARK MUSEUM

Officers, 1930

Wallace M. Scudder, President

Arthur F. Egner, Vice-President

Louis Bamberger, Vice-President

J. H. Bacheller, Vice-President

Louis Bamberger, Treasurer

Beatrice Winsor, Secretary and Director

**Alice W. Kendall, Assistant Secretary
and Assistant Director**

NOTE

In the spring of 1928 a pamphlet telling of an exhibit of working mechanical models to be seen in New York in the Boys' Department of a department store, came to Mr. Dana's attention. The maker of the exhibition, Mr. W. M. Clark, was interviewed and asked to lend the exhibit to the Museum, but it was found it would cost several hundred dollars for transportation and installation, and the exhibit was given up.

More than a year later Mr. Louis Bamberger talked with Mr. Dana about this same exhibit of Mechanical Models and Mr. Dana told Mr. Bamberger of his desire to show this exhibit in the Museum. Mr. Bamberger then decided to present these models, appropriately mounted and labeled, to the Museum.

The exhibit consists of ten sections, each measuring 5 feet 6 inches by 5 feet 8 inches, and weighing from 475 to 550 pounds apiece. In each section are sixteen small panels $15\frac{1}{4}$ inches square, each containing one or more movements. The sections are mounted on legs 16 inches high and are provided with covers both back and front so arranged that they can be handled exactly like a piano. The exhibit can be set up or taken down in a few hours. Each individual panel is connected electrically so that the visitor may set things in motion by pressing a button. The Museum plans to lend the exhibit under certain conditions, to museums and other institutions which are equipped to set it up with the care required and to transport it.

Mr. W. M. Clark of South Orange is the inventor and maker of the Mechanical Exhibit.

From his early youth Mr. Clark has been interested in machines and has always had a great desire to visualize the science of mechanics. His work of twenty years or more in perfecting the exhibit was inspired by a wish to give to inventors and to all who deal in machine technique a short cut to their various ends. The first exhibit made by Mr. Clark is now in the Museum of the Peaceful Arts in New York City. The second set is a gift to the Newark Museum by Mr. Louis Bamberger.

Miss Virginia Downward, Head of the Science Department, aided by Mr. Clark, wrote the labels which present the story of each movement to the visitor.

This exhibit will be of tremendous interest not only to a city like Newark with its many industries, but to the State as well.

In connection with this exhibition the Public Library has an alcove of books, pamphlets and periodicals devoted to the subject.

BEATRICE WINSER.

June 3, 1930.

CONTENTS

Description of Sections I—X	9
Glossary of Terms	67
Some of the Books Consulted	73
Pattern Making and Iron Casting	75
Exhibit of Pattern Making	76
Double Grooved Pulley	
Cam Wheel	
Exhibit of Iron Casting	80
Double Grooved Pulley and Cam Wheel	