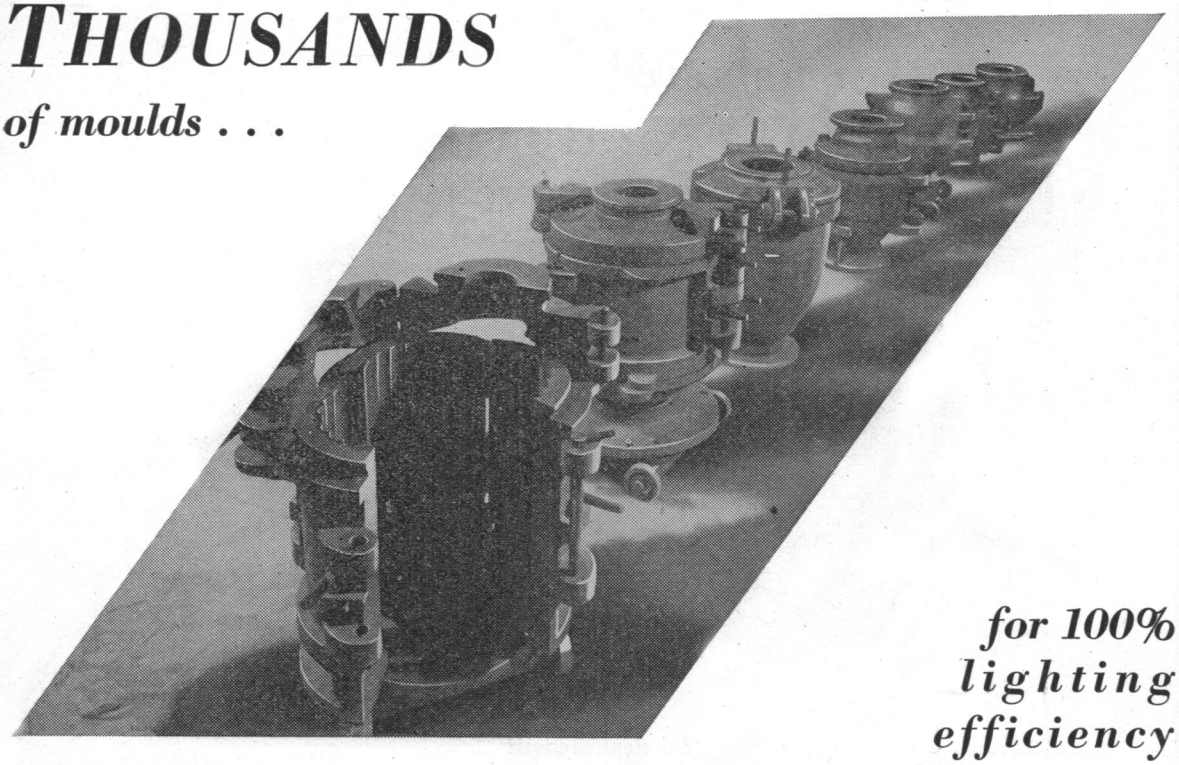
THOUSANDS

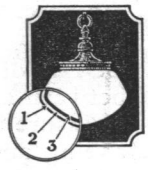
of moulds . . .



for 100% lighting efficiency

MOULDS for magnificent Celestialite Globes . . . thousands, to answer every lighting need . . . to adapt to every type of interior and exterior! The skill required in the fashioning of the moulds demands all the extraordinary craftsmanship that produces the Celestialite globes. The range of style and design available in Celestialite is nearly endless. Indeed, moulds are frequently "custom-made" to meet individual taste or unusual settings.

Architects have found in Celestialite the fortunate combination of high quality lighting and distinguished globe design to meet the demands of any interiors. For that reason, great buildings of every character—offices, universities, industrial plants, hospitals, theatres, and department stores have turned to Celestialite as the ultimate answer to the problem of interior lighting.



CELESTIALITE'S Three Layers

The Reason for its Superiority

[1] A layer of crystal-clear transparency—for body and strength.

[2] A layer of white glass—to diffuse the rays and soften the light.

[3] A layer of blue glass—to whiten and improve the quality of the light.

Sante Fe Building, Dallas, Texas, one of the many fine buildings lighted with Celestialite. Write us at once for information that will secure you as fine a lighting system. We will also send you a free fragment of Celestialite, showing its three-layer construction.

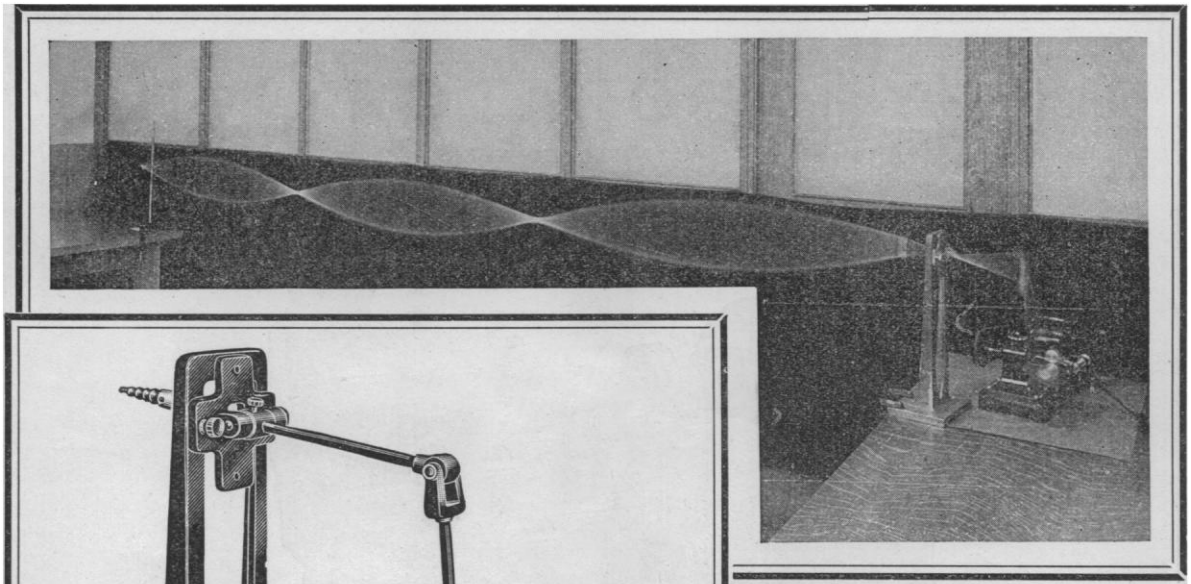
CELESTIALITE

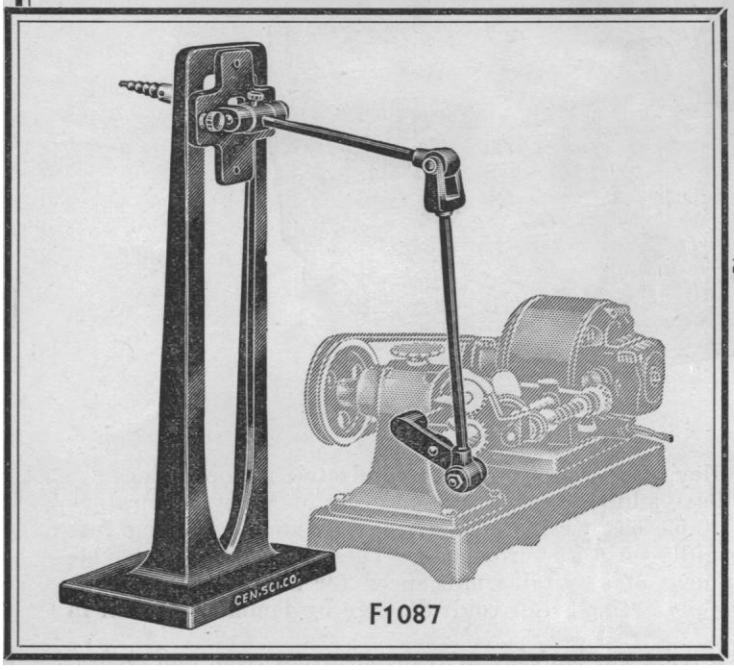
(Registered and Patented)

"NEXT TO DAYLIGHT"

Gleason-Tiebout Glass Company, 200 Fifth Avenue, New York City

GT—140





●This halftone, made from an unretouched photograph, shows the perfection and beauty of the standing wave produced by means of No. F1087 Cenco Mechanical Oscillator. The latter is being actuated by No. F1020 Cenco Friction Drive Rotator. A 12 foot white rubber tube is the medium in which the standing wave is produced. Any number of loops from one to seven could be produced with the above arrangement.

« « «

The Cenco MECHANICAL OSCILLATOR

An exceedingly useful accessory to the usual laboratory rotator which permits a variety of experiments to be performed with the rotator that were not previously possible. Chief among these experiments is that of wave demonstration in a most striking manner. Waves can now be generated in a long cord or tube, or a steady regular motion imparted to wave demonstration devices or water waves of desired frequency produced in a wave tank. Meldes experiment can be performed quantitatively on a large scale by measuring the frequency of the standing waves in a sashcord of known weight, diameter and length and under a known tension, when vibrated by this oscillator as an accessory to a rotator equipped with a speed counter.

The Cenco Mechanical Oscillator consists of a rocker arm of variable length-ratio about a fulcrum supported by a massive stand. The rocker arm is actuated by a connecting rod which in turn is given its motion by a counterbalanced crank. The latter fits the standard rotator socket. The rocker arm can be caused to oscillate either in a vertical or horizontal plane and at different heights on the support stand. The free end of the rocker arm is tapered and corrugated, so that a rubber tube may be slipped over it and wired fast. An eye is also provided for the fastening of cords. The amplitude of waves is adjustable over a wide range by sliding the rocker arm in the fulcrum-bearing sleeve and clamping it as desired.

No. F1087 . . . . . $17.50
(Price does not include rotator)

CENTRAL SCIENTIFIC COMPANY
LABORATORY CENCO SUPPLIES
Apparatus Chemicals
NEW YORK-BOSTON-CHICAGO-TORONTO-LOS ANGELES

SCIENCE

VOL. 74 FRIDAY, JULY 10, 1931 No. 1906

SCIENCE: A Weekly Journal devoted to the Advancement of Science, edited by J. MCKEEN CATTELL and published every Friday by

THE SCIENCE PRESS

New York City: Grand Central Terminal
Lancaster, Pa. Garrison, N. Y.

Annual Subscription, $6.00 Single Copies, 15 Cts.

SCIENCE is the official organ of the American Association for the Advancement of Science. Information regarding membership in the Association may be secured from the office of the permanent secretary, in the Smithsonian Institution Building, Washington, D. C.

THE REVOLT OF THE BIOCHEMISTS[1]

By Dr. P. A. LEVENE

THE ROCKEFELLER INSTITUTE FOR MEDICAL RESEARCH, NEW YORK

MAY I begin my remarks of this evening by acknowledging my gratitude to the men to whom I owe the great honor of having my name added to the truly illustrious names of the Willard Gibbs medalists who have preceded me. I am referring to the Board of Scientific Directors of the Rockefeller Institute for having liberally supported the work of the Chemical Division and to Dr. Simon Flexner for his help and encouragement, and then to those who have participated in the work of the Biochemical Division of the Rockefeller Institute, some for a longer and some for a shorter period of the twenty-seven years of the existence of the chemical laboratories.

To your section of the American Chemical Society and to the committee of award, I owe a special debt of gratitude, for I accept the medal not as a personal tribute but as an expression of recognition of that branch of science to the progress of which we have devoted our energies.

To-day, this branch of science is in need of encouragement. Even in European countries where biochemistry has had a long and glorious record and a great tradition, it is held somewhat in disfavor today. The story of the rise and fall of biochemistry in the esteem of the higher scientific hierarchies is in a way connected with the incident of the revolt of biochemistry against the concept of vital force or, as the Germans call it, "Lebenskraft." This was a revolt against restriction of the exploits of the human mind, for, modest as the domain of biochemistry may be, it had to align itself with some more universal philosophy in order that it might remain in the family of sciences.

Until nearly the middle of last century, every chemist was a biochemist. Chemical hierarchies did not yet exist. All natural substances whether of mineral,

[1] Address on the occasion of the acceptance of the Willard Gibbs medal.