A brief library circular on "special facilities and regulations for research" covers such matters as the assignment of study rooms for the convenience of persons carrying on group or individual research or engaged in advanced work. A special collection of reference books is immediately available and other books are brought from the stacks on application. Access to the stacks is allowed, and to some extent books may be taken away for outside use. There is opportunity for incidental typewriting and clerical service.

A "System of Inter-Library Loans" is defined by a circular letter of July 1, 1930. Such loans rest on the theory of a special service to scholarship by the loan of unusual books not readily accessible elsewhere. Loans to colleges and universities are customarily limited to books required by members of the teaching force in their own investigations. The system is intended to complement the resources of the local library rather than to supply the major part of the material needed for extended research.

Photostat duplication may be arranged on the basis of an official memorandum dated December 10, 1930.

Library of Congress catalog cards may be purchased or ordered by libraries or individuals. These cards have been printed for accessions since January, 1901. The stock of cards now covers about 965,000 titles, is relatively complete not only for books copyrighted in the United States but for a large fraction of the more important foreign publications in the library, whose theoretic field is all literature required for research.

A small pamphlet, "L. C. printed cards: How to order and use them," contains detailed instructions in regard to the manner of ordering cards on any well-defined topic. It is also possible to subscribe for proof sheets, for example, in geography and anthropology, medicine, science, technology. The number of subscribers for cards has increased from about 200 in 1901 to more than 5,000 in 1930, the latter figure including some 600 individuals and firms.

Complete sets of cards are deposited in 51 libraries, a list of which is published in the librarian's annual reports. This, as well as the library classification and subject headings, may be consulted in the principal university libraries of the country.

H. W. TYLER,
Consultant in Science

KOPERNIK

IN SCIENCE for January 17, 1930, Dr. R. L. Sackett writes: "Copernicus was a German who studied in Vienna and Rome. He taught mathematics and for thirty or more years considered the Ptolemaic theory."

This passage is inexact. I hope that you will allow me to give some information concerning the great Polish astronomer.

Nicholas Kopernik, called after the Latin manner "Copernicus," was not a German but a Pole. He was born in 1473 in Toruń, a town situated in Polish Pomerania, taken in 1793, after the second partition of Poland, by Prussia, recovered by Poland in 1920 by virtue of the Treaty of Versailles. For many years this borderland of Poland was the scene of many combats between Polish subjects and the Teutonic order of knights known as the Order of the Cross. Both the father and mother of the astronomer were natives of Upper Silesia, an ancient province of the Polish kingdom. The name of the family is purely Slavonic, being derived from the name of a church village "Kopernik," where it had its origin. The father of Kopernik before settling in Toruń was living in Cracow, then the capital of Poland.

Kopernik, or Copernicus, was educated in Poland, at first in a school in Włocławek, a town on the Vistula, later in the University of Jagiellon, in Cracow. From 1491 to 1495 he studied there theology, mathematics and astronomy. He studied afterwards in Italy, as did many Polish scholars in the fifteenth and sixteenth centuries, ecclesiastical law in Bolonia and Rome, 1496–1501, and medical science in Padua and Ferrara, 1501–1504, but he did not study in Vienna. In the year 1501 he taught mathematics in the Roman Catholic University "Sapienza" in Rome.

After having returned to Poland in 1504, Kopernik was charged with a high ecclesiastical post as a canon of the Roman Catholic church in Frauenberg in the province of Varmia on the western border of Poland. He did not leave this post until his death in 1543. In Frauenberg he wrote his famous book, "De revolutionibus orbium caelestium," published, however, in Nuremberg, through the interest of his admirer and pupil, George Rhetic, professor in the University of Wittenberg.

In his political and social activity the great astronomer gave evidences of his patriotism. He was known as the author of a plan to amend the money circulating in the Polish western provinces. He also in the period of the Polish combats with the Knights of the Teutonic Order commanded in 1520 the defense of the fortress Olsztyn in the province of Varmia.

ST. MICHALSKI,
Editor of the *Nauka Polska*

ERRONEOUS CITATIONS

DR. C. A. SHULL'S article appearing in SCIENCE for April 3, 1931, entitled "Erroneous Citations and Titles of Scientific Papers" is very much to the point and has perhaps more force and timeliness than the

writer realized. In the second paragraph can be found in italics, "It is never safe to copy a literature citation from some other author's literature list." Later on, in the same paragraph, by way of illustrating specifically the frequency of inaccurate literature citations the statement is made that "on looking up this citation, I found myself in the midst of a paper by Harden and Young on 'Action of Enzymes on Human Placenta.'"

Becoming possessed with a desire to see such a grievous error illustrated, I turned to page 577 of the Journal of Biological Chemistry, 36: 1918. There, to my astonishment, I found a paper on "Action of Enzymes on Human Placenta" not by Harden and Young, but by Hard*ing* and Young!

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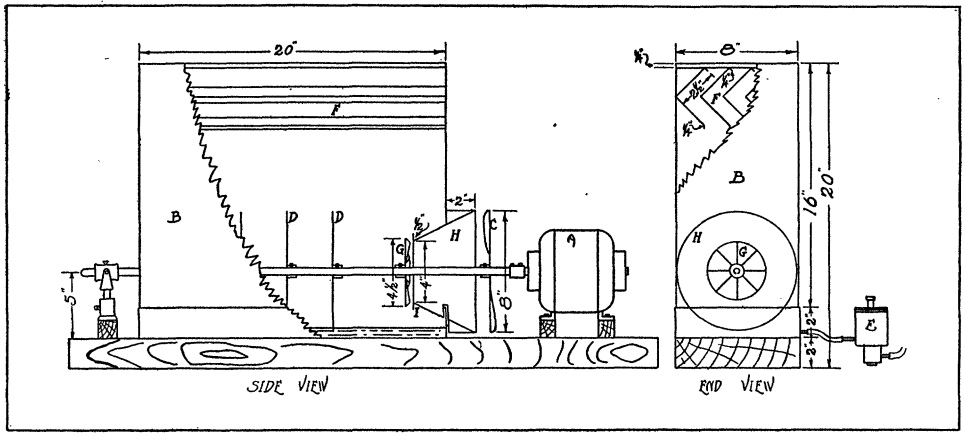
SCIENTIFIC APPARATUS AND LABORATORY METHODS

A SIMPLE DEVICE FOR HUMIDITY REGULATION

THE necessity for an accurate means of humidifying air in incubators, coupled with a limited budget, led to the development of the humidifier described herewith. Since the device is accurate to within ± 2 per cent. relative humidity and may be built complete for approximately $20, it seems worth describing in SCIENCE to make it available for others who may have similar needs. The writers hope to publish soon a bulletin containing a more detailed description of the machine together with some of the results that have been obtained from its use.



Briefly its characteristics are: (1) Accuracy not ordinarily attained, (2) simplicity of design with all the advantages attendant thereto, (3) adaptability, (4) cheapness. Operating the humidifier in a closed system, hygrothermograph charts have been obtained showing a line not varying beyond the limits of the 2 per cent. marks during the course of a week. This lack of variation of the hygrograph needle is not due to a lack of sensitivity of the recording mechanism, either, because the needle on the machine invariably dropped immediately when the incubator door was opened. Simplicity of design was attained by attaching the single moving part of the machine directly to the shaft of the driving motor and by the elimination of a hygrostat. A variation in dimensions will allow the machine to be used in any sized incubator. By coupling onto the end of the shaft, humidifiers in adjacent incubators may be operated by the same motor. Simplicity means cheapness, so that the entire mechanism including a ¼ H.P. electric motor may be assembled for slightly less than $20.

The operation of the apparatus as shown in the accompanying drawing is as follows: A continuous-duty electric motor (A) revolving at approximately 1800 R.P.M. forces air into a humidifying chamber (B) by means of a fan (C). Agitator discs (D) made of ¼ inch-mesh galvanized wire screen (hardware cloth), dipping into water at the bottom of the humidifying chamber, beat it violently and throw it into the air as a fine mist, thus raising the humidity of the incoming air. A float chamber (E) from a brass automobile carburetor maintains accurately the water level in the humidifying chamber. Baffle plates (F) in the top of the humidifying chamber prevent particulate water from passing into the incubator with the humid air. To prevent any particulate water from flying back through the entrance, a baffle plate (G) made from a metal disc in the form of a multiple-blade fan is necessary. A cone (H) tapering from a diameter of 8 inches at the fan to 4 inches