

BOTANY

Famous Botanical Collection Is "Refugee" from Spain

Plant Collection Made in Mexico in Eighteenth Century Has Now Been Brought to United States for Safety

PLANTS, no less than people, are among the refugees escaping from destruction in unhappy, revolt-torn Spain. The U. S. National Herbarium has just become host to part of one of the most famous collections of botanical specimens ever made in the New World, which was taken out of Madrid just before the present insurrection broke.

The collection, made in Mexico during the latter part of the eighteenth century, has already had a stormy and romantic history, including a previous "refugee" sojourn in France during the Napoleonic wars. Its present hegira to America ended at the doorstep of Dr. Paul Standley of the Field Museum of Natural History in Chicago, who divided it up and sent various sections to institutions where the botanists were specialists in the study of the particular groups of plants represented. The sec-

tions sent here include ferns, nettles, passion-flowers, and smilaxes.

The collection was started in 1787 by Dr. Martin Sesse y Lacasta, eminent Spanish botanist of that day, whom King Carlos III sent to Mexico to make a complete collection of the flora of that country and to set up a chair of botany at the University of Mexico. A young Mexican physician, Dr. José Mariano Mocino, joined him in the work, gave up medicine for botanical research, and returned with his chief to Spain in 1804. Upon the death of Dr. Sesse in 1809, Dr. Mocino, who had become Director of the Madrid Cabinet of Natural History, took full charge of the collection.

Through wars, imprisonment, exile, destitution, and ill health, the devoted Mexican botanist stuck with his precious collection. But after his death the valuable sheets of specimens lay neglected. Now, returned to the con-

tinent of its origin, though to a different country, it again assumes scientific importance.

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LIBRARY SCIENCE

Urges Photographing Books As Preservation Measure

MICROFILMS—small sized images of books and documents upon motion picture film—give libraries an inexpensive method of preserving the written and pictorial record of our civilization.

This was made evident when C. G. Weber and J. R. Hill of the National Bureau of Standards reported to the Society of Motion Picture Engineers that the cellulose acetate or "safety" film used for such microfilms has "lasting qualities comparable with those of permanent record papers of high quality" and that the "optimal atmospheric conditions for the preservation of paper records are suitable for this film."

It was also emphasized that such safety films are no more inflammable than books and that hence they offer no new problems in fire protection.

Microphotographic duplication upon microfilm is coming into increasing use for making copies of rare and inaccessible books, for exchanging material between libraries and for making available material that could not otherwise be published. Science Service has sponsored the development of microfilms for use in connection with scientific literature.

The Bureau of Standards scientists tested the stability of both nitrate and acetate motion picture film. Cellulose nitrate film, the sort used in commercial motion pictures, is highly combustible and explosive. The nitrate film deteriorates beyond usefulness in 10 days when subjected to the accelerating aging test used upon record papers. This involves heating in a dry oven at the temperature of boiling water. The cellulose acetate or safety film, such as used for microfilm, withstood the oven-aging for 120 days without serious physical or chemical change.

This report is expected to encourage the use of microfilms in libraries and to allay any fear regarding how long they will last.

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HE CAPTURED THE ELUSIVE BIRDS

W. F. Welch, veteran turkey raiser and caretaker at the Winewood wild turkey farms, near Parker, Va., feeds his trained "turkey" dogs which were used to find the rare fowl in the uninhabited Santee swamps of South Carolina.

The island of Socotra in the Arabian Sea is noted for its extraordinary plant life, including cucumber trees that shine in the sun like marble tombstones.