

**INDUSTRIAL
STUDIES
AND EXERCISES**

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Industrial Studies and Exercises by O. S. Reimold & David P. Barrows

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O. S. REIMOLD & DAVID P. BARROWS

**INDUSTRIAL
STUDIES
AND EXERCISES**

PHILIPPINE EDUCATION SERIES

INDUSTRIAL STUDIES AND EXERCISES

BY
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FORMERLY A DIVISION SUPERINTENDENT OF
SCHOOLS IN THE PHILIPPINES

WITH AN INTRODUCTION BY
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PHILIPPINE ISLANDS

ILLUSTRATED



YONKERS-ON-HUDSON, NEW YORK
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1910

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INTRODUCTION

The following studies in industrial work are based upon the arts and industries of the Filipino peoples. Few countries can show so many kinds of attractive handiwork suitable for teaching in schools. Trees, plants, and grasses which in other countries have to be brought from afar to furnish the materials for this work here grow abundantly.

The Filipinos have two fine gifts. First, the quickness of their hands; perhaps no other people in the world learn so easily to use their hands and fingers cleverly. Second, the artistic sense; they love beautiful things — colors, patterns, and pictures — and they love to make them. This talent shows itself not only in the paintings of such great artists as Luna and Resurrección, but still more strikingly in the many beautiful articles made by humble people.

For many years, the native arts and manufactures of the Filipinos have been disappearing. There are provinces where at the time of the Spanish conquest the people made fine cotton cloths, but today do nothing of the kind. There are towns once famous for mats and baskets which no longer make them. Only three or four towns make good hats, although the demand is so large that many hundreds are brought to Manila each year from foreign countries. In getting a modern education, the Filipino boy and girl should not forget or slight the many excellent things done well by their parents and grandparents. Among these are the popular industries told about in this book.

We whose aim is education believe that it is a great good to a child to learn to make well some useful thing; to make it beautiful is an increased pleasure. We believe that the training of eye and hand obtained by learning to make a fine mat will help the child many times in after life to use his fingers skilfully and to know and love well-made things. Furthermore, we believe that the schools should encourage, in every way, the practice of "household industries," that is, industries that can be engaged in by all members of the family without leaving the home. In

many provinces, people have little to do between rice planting and harvest, and again, between harvest time and plowing. Idleness frequently leads them to do foolish and harmful things; sometimes they actually suffer want for lack of employment. To such people, household industries are most important. Were it not for the spinning and weaving of cotton cloths, the Ilokano people would not be able to make a living on their crowded and not very fertile coast.

For all these reasons the native arts and industries were chosen as subjects of study in primary schools when, in 1904, the course of study for Philippine schools was framed. Splendid teaching along these lines has already been given in all parts of the Islands. I have been in schools where every boy was wearing a buri or pandan hat which he himself had made, and in other schools where every girl had learned to embroider linen in a way to delight the purchaser of such fineries.

About two years ago, a "standard" of industrial work was announced which each child must reach to be promoted from Grade III to Grade IV. This "standard" is the ability to make well some useful, salable article and to write a little essay telling about the materials from which it is made, its manufacture, its use, and its worth. This book helps the pupil to both ends; it teaches how to make beautiful things, and it teaches how to tell about them in accurate and well-chosen language.

DAVID P. BARROWS

University of California, 1 October, 1910

To the Teacher: On each first page of a subject (see pages 5, 9, 13, and each successive fourth page) is a list of words and expressions which it is essential that every pupil should understand and be able to use correctly. Let the pupils use each word or phrase in several sentences relating to the subject under discussion. Words followed by "(n. & v.)" are used both as noun and verb—teach the use of both. Of the nouns, both singular and plural forms should be used; of the verbs, the present, past, and participle forms should be used.

ABACÁ



What is growing in this field?
How tall are the plants?
How do the men cut abacá?
What is on the cart?
Where will the man go with the cart?

stalk

leaf

leaves

abacá fiber

coarse fiber

fine fiber

bleach

strip (n. & v.)

stripper

stripping knife

stripping machine

baling machine

bale

cord

rope

lupis

sinamay

pinolpog



Cut a stalk of abacá or banana plant. You will find many small threads. These small threads in the stalk are called fibers.

In abacá there are many fibers. Abacá fibers are very strong.

This man is taking the fiber out of the abacá stalk. He is stripping off all the soft part with a smooth knife. If the knife is rough, the fiber will not be fine.

Abacá fiber makes strong twine and rope. Cord is small rope. The fisherman uses rope and cord for his nets. Much rope is used on ships. Is the rope on your flag-pole made of abacá?

Women can weave cloth from fine abacá fiber. The ladies make *camisas* of this cloth.

Very much abacá grows in the southern part of Luzon. Can you tell on what other islands abacá grows?

Much abacá is sent to America and Europe. Philippine abacá is the best in the world.

1. How does the farmer plant abacá?
2. Why does he have trees in the field?
3. What plant does abacá look like?
4. What kind of leaves has abacá?
5. How tall does abacá grow?
6. Can we eat the abacá fruit?
7. What part of the plant do we use?
8. How many times a year is abacá cut?
9. How can we tell when to cut abacá?
10. How do the men cut abacá?

1. How does the man take the fiber out of the stalk?
2. What kind of knife is best for stripping?
3. How does the fiber look?
4. What color is it?
5. What can we make of strong fiber?
6. How is rope made?
7. For what can we use rope?
8. What cloth can we weave of fine fiber?
9. What can be made of the cloth?
10. In what provinces does much abacá grow?

