#### $\mathbf{VII}$

### **EDUCATION**

INSTRUCTION AND EDUCATION—INDUSTRIAL EDUCATION—ORPHAN ASY-LUMS—JOSE DE DIEGO UNIVERSITARIAN INSTITUTE—COLEGIO PUER-TORRIQUEÑO—COLLEGE OF AGRICULTURE AND MECHANIC ARTS— UNIVERSITY OF PORTO RICO—PAN-AMERICAN UNIVERSITY—ATH-LETICS—ASSOCIATION OF PARENTS AND PUBLIC SCHOOL TEACHERS—PUBLIC LIBRARIES

#### Instruction and Education

Methods of Teaching. Past, Present and Possibilities for the Future.

By José González Ginorio,

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By conscious and universal consent the school has been placed at the head of all social institutions, because of the experience acquired by humanity through centuries of intense struggle in all lines of endeavor, this experience having convinced mankind that the solution of every social problem is a question of education; that the school—in any of its multiple aspects—is the only institution potentially capable of affording such problems a satisfactory solution.

Nevertheless the school in Porto Rico like the world over, has never had a perfected, definite course to follow in the preparation of the child for the best use of his future life, in spite of it being as old as man himself, that animal that because of being rational is auto-didactic.

The Period of Oral Teaching. Questions and Answers. For centuries the school in Porto Rico was of the same type as the primitive schools of almost all the southern countries of Europe. In its first epochs, teaching was oral, due to the lack of books. The teacher gave out a question, and dictated the corresponding answer in fragments to the class, the group of students repeating it orally together until all had learned it by memory.

An analysis of this method presents but two ends—the direct, the teaching of established facts, for whose acquisition the children exercised only their attention; the other, the indirect—the training of memory.

Another Form of the Same System. At last the book made its appearance, a factor of chief importance, inferior in efficiency, only to the teacher. However, it was merely a collection of questions and answers prepared by some of the ablest teachers. Though such a book assured unity of teaching it entirely killed all the teacher's professional individuality, because it allowed them no opportunity to use their creative faculties. Soon the text book became the authority in the school room, leaving the teacher in the undesirable position of "hearer of lessons." The authority of the book imposed its facts on the pupil, the teacher's rigid severity closing the door to any further appeal. The reign of the text book was long and its plan invariably the dialogue method of questions and answers.

Schools Which Imparted Knowledge But Did Not Educate. This was the status of the schools of Porto Rico in the past and practically it was the same in 1898. Up to this time, though there was real progress, the intellectual level of the community as a whole was not duly raised.

Virtually, the school of the past did not educate, it only imparted knowledge and that only to the extent the old style text book allowed. In short, neither the judgment nor the reasoning power received the necessary stimulus and the persons really notable as intellectuals in the island became so in spite of it.

The other aspects of education were completely forgotten. Physical culture was unknown; ethical education was supposed to be found in religious teaching—a great error, be-

system remained practically unchanged. General John Eaton, Chief of the Bureau of Education up to June 30th. 1899, made only a rapid survey of conditions and dictated a few military regulations for the management of the schools without fundamentally altering the status of the teacher nor of the school.

New Methods Adopted. The first insular



ESCUELA PRIMITIVA DEL INOLVIDABLE EDUCADOR DE VOCACIÓN, MAESTRO RAFAEL CORDERO. (NOTABLE CUADRO DE OLLER).

THE EARLY SCHOOL OF A NATURAL BORN TEACHHER—RAFAEL CORDERO. (SEE BIOGRAPHICAL SKETCH).

cause a body of religious doctrine, no matter how great its moral teaching may be, is beyond a child's mental reach.

The School of the Present. The school of the present is the product of most intense labor carried out during the last twenty-two years. It has undergone many radical changes, naturally. Because of the interest which the people of the United States have always had in the education of the child, as a means of properly preparing the citizen, the island's school was one of the first institutions to receive attention.

Schools During the Military Rule. During the short period of military rule, the school

Board of Public Education, presided over by Dr. Victor S. Clark, succeeded General Eaton, and was the first organized governmental body to introduce plans of organization and new methods of teaching in the schools of the Island. The internal organization of the school admitted fundamental modifications, but its chief factor—the teacher—could not be substituted, for two reasons, one economical, the other professional, both then difficult of solution.

Dr. Clark, well advised by his associates in the Board, decided to do the only wise and practical thing: to keep the existing personnel and to try and better their professional conditions by training them in modern practices, so that they might adapt themselves to the new methods of teaching.

The First Text Book Prepared in Porto Rico for Porto Rico. This gave life to the first text book on fundamental teaching and elementary methods prepared in Porto Rico for Porto Rico, the "Manual del Maestro" (Teacher's Manual), prepared under the direction of Dr. Clark. It gave information in both English and Spanish concerning the methods recommended for teaching elementary subjects. Today, it has only historical value, but then it served a purpose, and was of use even to experienced teachers, who, seeing ahead new and wider horizons, decided to apply themselves to the study and investigation of the possibilities offered.

School Organization Not Fundamentally Altered. The school did not gain as much as the teacher. But the benefit of the latter guaranteed a more brilliant future for the former Mr. Clark's efforts, nevertheless, did not fundamentally alter the school organization, though the methods gained something, because the teacher began to make use of the new ways of teaching, though the dialogue was not entirely discarded.

When the Child's Mind Began to Work By Itself. Up to that time, the child had been considered only as a receptive being. The creative faculties were entirely forgotten, perhaps unknown. Now for the first time, the child occupied its real and integral status as a rational being, able to receive impressions, express emotions, and capable of producing and creating. The child's mind began to work by itself. These steps, however, were taken with great timidity, because of ignorance of the fundamental principles of true pedagogy, and as many think, because of doubt of their efficiency.

A Real and True Change. In 1900, when Civil Government was established, the public school underwent a real and true change of such violence as to shake its old foundations. The reorganization established by the Island's first Commissioner of Public Education—Dr. Martin G. Brumbaugh—gave personality to the elementary school in its rural and urban

aspects. But the new status of the school encountered the same inefficiency Dr. Clark found.

The teacher, the intelligent factor in the school, could not be changed as easily as the text books, furniture, etc., and the new administration working toward the solution of this problem, made an intensive campaign to continue and complete the preparation of the teachers. This reorganization besides revolutionizing the school and changing it to its foundations, was intended to increase the number of schools.

This meaning corresponding increase in the number of teachers, the administration decided to prepare a number of teachers of both sexes, and hence established a special course for their preparation.

Hundreds of young men and women received, after a period of intense instruction and practice, licences to teach in rural and urban elementary schools. The elementary school was organized as a graded school, the classification of children being made according to their intellectual development. But all the purposes that the school directors had, plausible though they were, could not, from the start, eliminate all the difficulties—professional and economical.

Teaching of English Demanded. The new sovereignty of Porto Rico brought its own language with it, and it was natural, convenient and even necessary that such language should be taught in the public schools so as to prepare the future citizen with a better and more complete understanding with the United States. But the addition of English as a fundamental subject in the course of studies created the necessity of securing capable English teachers brought from the States.

Text Books Inadequate to the Island's Needs. At the beginning of the new public school of the elementary grade type in vogue at that time in all countries advanced in matters of public instruction, the first great mistake was made—the introduction of text books prepared for the school children of the States. For the teaching of English, such books, inadequate for Porto Rico, were placed in the hands of teachers, who were not trained teach-

ers. This hindered, from the very first, a correct course in the teaching of English, thus making difficult the introduction of proper methods, and the preparation of text books which would faithfully correspond to the plan and method.

In the other subjects, besides English, the American text book translated with more or less ability to Spanish, lacked necessary adaptation. Teachers undertaking their work under the new methods, therefore, had to make use of inadequate tools, thus limiting both their powers of instruction and the results.

Visible Limitation of Progress of the Teacher. From then on the school developed under poor pedagogical principles which visibly limited the teacher's professional progress. Native teachers duly prepared for the work and aware of conditions and needs to conceive and give form to the plans and methods necessary to create the Porto Rican school, even though it were only a wise adaptation of the American school, were not asked to participate in this reorganization, nor allowed to contribute in the preparation of text books.

Great Contrast Between Old and New Methods. In regard to methods, the contrast between the old and the new school was great. From the dialogue method of questions and answers the school passed to the objective method, the essential characteristics of the modern system of education. Text books brought from the United States answered this end, but by their lack of proper adaptation, they made unproductive, in the greater part, the earnest efforts of the teachers to adapt themselves to new conditions.

Adoption of a Natural and Logical Plan. When Dr. Brumbaugh established the new system of teaching, respecting the fundamental principles of using Spanish as the only natural and logical means of instruction, he greatly facilitated the task of adapting the teacher to the new methods because the first text books introduced had not been properly adapted.

What was the gain by the change? In the mechanic art of teaching to read, nothing, for bad as the syllable method was, it was effective, because once the student learned to spell

and combine syllables, he slowly but accurately began to read. While by the "word method," the uniform result always obtained was that the child learned by route words and even sentences, and then, with peculiar ability, reproduced the contents of a whole page; that is, by association of ideas, comparison or observation of details, or pictures, he remembered the contents, but save from his reading book, the child did not know how to read. And this evil, which had its origin in 1900, grew stronger each day, due to lack of definite policy in the management of public instruction and because of the limited professional preparation of the first grade teachers.

Every Teacher Taught in His Own Way. In the course of time, each teacher taught reading in his own way, and those of them who resorted to the old syllable method did not obtain the worst results. This situation was prolonged for a number of years.

For teaching English, the method was the same one used in the United States, but the mistake was greater, because it commenced erroneously to teach a subject which for various reasons, would become of first importance. The lack of a judicious course and of a wise method of teaching that language brought about a series of experiments. In fact, the confusion which followed had its origin in the lack of judgment displayed in planning from the start the methods of instruction in this subject.

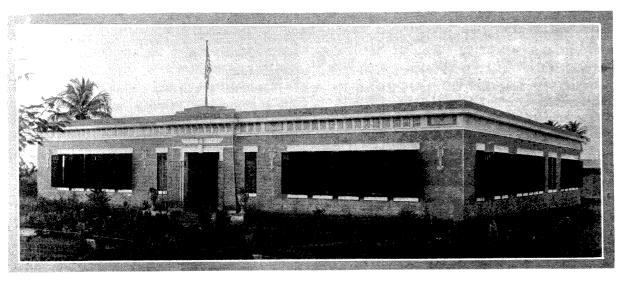
A Text Book for Arithmetic Founded On Nature. In arithmetic the benefit was real, thanks to an acceptable Spanish translation of an elementary arithmetic then in vogue in the United States, based on Pestalozzi's plan and adapted by Grüber, one of that master's disciples. Its fundamental principle is founded on nature, its plan of teaching being first to count, then to add, and thus successively to subtract, multiply, divide, etc. The child acquires from its birth a series of experiences, and in regard to numbers it is impossible to fix a rule as to just how and when a child begins to reason, nor in what order it acquires its experiences. Grüber, faithfully interpreted by Wentworth, initiated the child, from the first lesson, in all the elementary processes—it counts, adds, subtracts, multiplies, divides and works in fractions the same as it does with its playthings—and always in a concrete form.

Thus the value of a number or conception of a quantity is obtained. Once this is reached, it is given abstract value, and from that arises the representation of the number or quantity in the adopted conventional signs.

In this particular, the Island's schools gained

lessons, excursions, etc., the teachers having at their disposal profusely illustrated text books. But few of them saw all that was contained in the illustrations and even less, the great use they could make of such geographical information.

Writing. In writing or permanship, the most useful of the graphic arts, the old Spanish school with all its defects, almost always made



ESCUELA RURAL CONSOLIDADA, ARECIBO.—CONSOLIDATED RURAL SCHOOL.

from the first moment and, if the progress was not great and rapid, it was due to the fault of many teachers not being able to quickly adapt themselves to this method.

A Right Comparison of Old and New Methods Lacking. In geography great results could have been obtained if the teachers had been able to establish the right comparison between the old and new methods of teaching. The former was a method which only saw its speculative aspect, and therefore, tended to accumulate in the child's mind a multitude of facts, preconceived definitions, and the general terminology of all bodies of land and water, while the new plan placed in his hand, in synthesis, consisted in leading the pupil to the observations of the physical aspect of our planet beginning with the place the child occupies in school, and from there continuing to increase his geographical horizon.

The former way of teaching geography was only educational in the absence of out of doors

a penman out of each pupil, even though its teaching was slow and tiresome. But in the revolution which shook the Island's schools, the value of penmanship became lost to view and has not been replaced to date.

Thus the Schools Remained Until 1916. Such were the fundamental changes that Porto Rico's schools underwent, and the organization and methods adopted remained during many years without any essential changes.

Such organization applied both to the elementary urban graded and the rural graded school, the difference between them being that while the former had two three hour sessions, the latter had only one of five hours. In the former, too, as a rule, each grade was in charge of a teacher, while in the latter, all grades were under one teacher.

Thus Dr. Brumbaugh founded the school in the Island, thus he left it to his successor and thus fundamentally it remained to 1916.

A Radical Change Introduced in Methods of

Teaching English. During the administrations of Commissioners Lindsay, Falkner, Dexter and Bainter notable changes took place in the addition of new subjects, the changing of text books, the modification of school hours, and in the creation of industrial schools, high schools, etc., but fundamental methods were not essentially altered. Nevertheless, the teaching of English, which, during Brumbaugh's and Lindsay's administrations (1900-1904) had not been modified, was subject to a radical change during the administration of Mr. Falkner, Dr. Lindsay's successor, who initiated first a partial and then a general experiment. Brumbaugh as an educator and organizer did not give a thought to the substitution of natural and logical means of instruction for an artificial one.

An Administration Devoted to Developing the University. Dr. Lindsay, a professor of known reputation, retained the system inherited from his predecessor, and having dedicated his life to college teaching, gave all his devotion and enthusiasm to the creation and establishment of the University of Porto Rico, a work which gives credit to his administration.

Two Grave Errors. It was Falkner, a man of wide learning and a renowned statistical expert, but not an educator, who delayed the progress of the island's school by committing two errors. The first was to propose and obtain legislation creating a new type of teacher, called preparatory teacher. The qualifications for same being only such education as had been secured up to the sixth grade in the elementary schools, and the recommendation of the local authorities. This enabled them to obtain the license of "preparatory teacher," and to teach a first grade in the urban schools, or in rural schools situated at some distance from a town, which meant the greatest degree of responsibility placed in the hands of the least experienced.

The second error was the initiation of the teaching of all subjects in English. Through slight changes the Department wanted to better the teaching of the English language, as the method which had been in use since the

reorganization of the system had proved completely inadequate.

The Teacher Was First Blamed. At the beginning, after Brumbaugh's time, it was believed that the trouble was in the teacher who taught English, and they began to bring to the Island a new type of teacher, one considered better prepared for such work.

Then the Text Books. Later it was thought the trouble was in the text books, used, and others were substituted. For practical results, however, the change was only of authors, because the plans on which the new books were based were adaptable only to English speaking countries.

The New Plan. Falkner's administration noticed the deficiency but failed to find the remedy. The plan of the Department from then on was to teach English and all other subjects, except Spanish in English. After a short period of trial it was decided to select a number of Porto Rican teachers for the primary grades in English. The selection was made by means of an examination before the Examining Board, which did not offer great difficulties, because a demonstration that the candidates knew how to read English with an average pronunciation, and an acceptable enunciation; to talk it with relative facility, even though he did not possess a large vocabulary; carry on a conversation on familiar themes of the street and school, and thus prove a reasonable comprehension of oral English; be able to write, on dictation, single words and sentences obtaining an average mark of 60, as a minimum; and to teach a class of children any lesson on reading English, arithmetic, or nature study, was sufficient for the granting of an English graded teacher's license.

An Old Trouble Reappears. The strong point in this plan was that it placed native teachers in charge of primary grades. Nothing more natural. But to oblige the teachers to do all teaching in English, meant limiting them to a reduced vocabulary, which only permitted a determined number of questions by reason of slight knowledge and information on the means of instruction. The explanations, so necessary when a child does not easily under-

stand a subject, were impossible, the teacher lacking adequate knowledge of English. The result was that the teacher had to resort to the text book and become its slave instead of using it as a means of information for the child and as a guide in the method of teaching.

While for the student, the new plan meant an enormous loss of time in the acquisition of the knowledge proper to each subject, and in the extension of the same in each grade. This waste of time not being compensated by greater progress in the English language than he would have otherwise obtained.

Then, too, if the instructor was not a master of English, his pronunciation was defective and his vocabulary limited, and thus he had no chance whatsoever to resort to the thousand and one means which the real teacher always has at his disposal to make things clear to the pupil, who could advance only to the comparatively low standard of English, knowledge of the teacher, and which he learned at the expense of the other subjects.

Primary School Methods a Great Obstacle to Students in the Higher Grades. In the higher grades the teaching of English was by American teachers or Porto Ricans educated in the United States. The former were excellently equipped for teaching, because the language used was their own, while the latter had serious difficulties to overcome. But, and this was a serious factor, the pupil was not prepared to receive the teaching in these grades, because, having been taught in the lower grades, in Spanish or in English with the deficiencies already mentioned, he found a great obstacle in the means of instruction due to the double mental effort of making up for past deficiencies and covering the ground allotted to each grade. In general, all the energy was concentrated on the teaching of English, at the expense of all the other subjects, without taking into consideration time, cost or effort.

Many Changes But No Fundamental Improvement. But the methods of teaching, however, did not fundamentally improve although the plan and the text books were changed. Some teachers were substituted for others, some native teachers were authorized to teach

in English, but without creating a method or procedure which would assure the realization of the purpose of this movement to make our island bilingual, beginning to prepare in that way the future citizen. So new text books also prepared for use in the States were again substituted.

A Trained Educator Discovers a Fundamental Error and Corrects It. The next administration, that of Dr. E. G. Dexter, received from its predecessor the system outlined and in regard to methods the five years that it lasted only offer two aspects worthy of discussion. The first was the elimination of the preparatory teacher, a beneficial step. Unlike Falkner, Dexter was a trained educator and saw the danger of employing young men without sufficient academic preparation and professional training in the teaching of the first grade, the foundation stone in the Island's system of education.

Much Time Consumed But Small Results. The second point was an innovation in the plan for teaching English. It consisted in initiating the teaching in English of all subjects from the first grade and commencing the teaching of Spanish in the second grade.

The idea being that the pupil would learn how to read and write English in the first grade, and that, therefore, it would be very easy for him to learn how to read and write in Spanish in the second grade. Experience, however, demonstrated that the child consumed all the time allowed to the first grade without learning how to read and write, and that thousands of children had to repeat this grade more than once in order to be passed to the second grade.

New Text Books and Better Teachers, But No Better Results. In other grades the modification always consisted in the substitution of some text books, for others, none of them especially prepared for Porto Rico and not even in harmony with the plan established by the administration.

The personnel was greatly improved by the addition of a large number of teachers graduated in United States Normal Schools, or in the Island's University, but many of them had no experience. Hence, unskilled and working

under a system which did not respond to the needs of the child they were supposed to educate, but using inadequate text books for both system and child, methods did not visibly improve.

In the Philippines, where there exists the problem of giving the Archipelago the national language that it lacks, because Spanish is spoken only in several towns and by a small minority of the inhabitants and because the means of verbal communication is a series of dialects almost rudimentary and corresponding each to a tribe, there was common sense in establishing the teaching of English and in English. And further, not only were the teachers employed not prepared for the work of developing the new system but they were allowed to begin to prepare text books. One of those text books—a series of English language lessons—was adopted as the official text book in Porto Rico, but due to lack of necessary adaptation and to absence of the right preparation of the children, it was withdrawn, though for a long time it remained in the Island's official course of studies.

Dr. Dexter's administration did not fully pay due attention to the problem of creating methods for the school, and his wish to present voluminous statistics absorbed all the attention of the school superintendents.

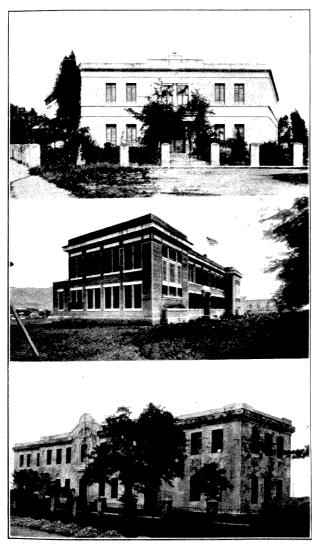
When the Teachers Tried to Break the Record. The system of double enrollment, a teacher working with two groups of fifty pupils each, one in the morning and one in the afternoon then began, and the rural school was the most burdened by it as enrollment had no bounds. There was, for example, a school in the northwest part of the island whose enrollment reached 250 pupils, which divided by two, gave 125 to each session. To this same region belonged the rural school which had the second highest enrollment.

The teacher who, as it is commonly said, "broke the record," received an enthusiastic letter from the Island's Commissioner of Education.

The author of this article, a year later undertook the responsibility of doing his duty in reorganizing these schools, reducing the enrollment in both, to a number which though

still high, in his opinion, lessened the evils. From that school of 250 pupils three schools were formed each with a teacher of its own.

Vocational Studies Introduced. The next administration, that of Mr. Edward G. Bainter in 1913-1915, which inherited the system established by Commissioner Dexter, did not



ESCUELA LUCHETTI (ARRIBA) Y ESCUELAS GRADUADAS DE GURABO Y VEGA BAJA.

THREE EXAMPLES OF MANY OF THE ISLAND'S MODERN PRIMARY SCHOOLS.

fundamentally improve methods, because the plan established in former years under Dr. Dexter's administration remained in force. Mr. Bainter gave special attention, and almost all his devotion to the establishment of special teaching of agriculture, manual training, do-

mestic sciences, music and drawing, that is to the addition of the course of studies which are termed vocational. And in his desire to render in his reports to the Federal Administration a certain amount of work done, and a reorganization in the system of public education effected, he committed the mistakes of making general the teaching of these special subjects without careful study of the economic conditions either of the Local School Boards or of the Insular Government.

The expense was enormous and the results of the first two years did not compensate in the least degree for the sacrifice of attention to the other school problems.

Many of the municipalities which established such classes had to stop them on account of lack of both, enrollment and funds for their support and development.

Three More Years of Accumulation of Errors. Toward the end, this administration had already begun to correct the chief mistake by preparing teachers for the work in these subjects. But apart from additions to the course of studies the school did not essentially improve.

On Commissioner Bainter's resignation before the end of his administrative term, there ensued a short period when there was no Commissioner, but as this occurred at the end of the school year and only extended through the summer it had absolutely no influence on the public school, one way or the other.

A New Commissioner and New Plan of Campaign. At the beginning of the year 1915-16 the newly appointed Commissioner of Education, Dr. Paul G. Miller, arrived. He was a man of wide experience in the public schools of the Island, as he had held in them the position of English teacher, District Superintendent, General Superintendent and Principal of the Normal Department of the Insular University, and besides knowing the peculiarities of the people, had a good knowledge of the needs of the schools and the mistakes made in them.

Guided by this experience he devoted his first year to studying the prevailing conditions and, toward the middle of the school year, called to a series of meetings all the district superintendents and the technical administrative personnel of the central office of the Department of Education, and in these meetings he outlined his plan of campaign.

An Advance Step. The first thing done was the adoption of a measure, which fundamentally, modified the system of education in force up to that time. At the start of the school year 1916-17, the graded school was altered, the first four grades were taught in Spanish; English being taught orally in the first two grades, beginning the methodical teaching of reading and writing in the third grade, and continuing through the higher studies up to the eighth grade, giving attention to the oral and written language in a progressive form, reaching the higher grammatical studies in the higher grades of the elementary school.

The fifth grade was considered a grade of transition, because, thanks to the vocabulary and the practice in the English language obtained in the first four grades, the pupil entered that grade in good condition to study in English. In this grade they began with English as a means of instruction the study of arithmetic and geography. The latter having been begun in Spanish in the fourth grade.

Virtually, what the pupil did in the fifth grade was to express in English the knowledge acquired in the fourth, amplifying the subject a little. The remaining subjects of this grade, Spanish and Hygiene, were taught in Spanish. The sixth, seventh and eighth grades were totally instructed in English with the exception of the Spanish language, naturally taught in Spanish.

This first modification of the educational plan, though limited, was an advance over all the former organizations, it being a beneficial rectification though incomplete, of the mistake which experience had demonstrated and common sense had corrected and which unjustified temerity had maintained. As the medium of instruction is a vital factor by which to judge of the merits of the methods employed in the class room, we must admit that this first decision of Commissioner Miller, exercised a beneficial influence on the general methods of teaching in the primary school, because it restored the proper surroundings to make pos-

sible an effective process of education. What a pity that Dr. Miller did not effect this fundamental change in all the elementary grades at least, up to and including the sixth grade! Because the first six grades constitute the period of the acquisition of fundamental facts in all the subjects and language habits are formed and, if education is logical, in no other period of it is a larger vocabulary acquired.

If that reform had been carried out to that extent, the Island's system of education would have responded to the ends pursued, and would have defied all criticism and analysis.

The seventh and eighth grades are for the organizing and application of facts, rather than for their acquisition. And in regard to the enlargement of knowledge in the different subjects, these grades would not offer the Porto Rican student the difficulties they do today. The greater capacity, physical as much as mental, obtained by the pupils on reaching these grades, facilitates them, not without serious obstacles, to conquer, the study of a subject in a language not their own. And the relative dominion which, in that foreign language the student has acquired in the first six grades, through a methodical progressive and strictly pedagogical study, would be sufficient preparation to undertake the acquiring of knowledge by studying in a language not his own, reproducing ideas and thoughts in that language, and coming to think, that is, to create, in that second means of expression which he must acquire.

Adequate Text Books. Simultaneously, with this radical change Commissioner Miller decided to introduce the proper methodology in each grade and in each subject, by adopting text books prepared in Porto Rico for Porto Rico by persons who had long experience in the public schools of the island. This second measure was as wise as the first, but of wider scope because it did not limit its effects to any grade or subject. Necessarily, a text book for a determined subject and grade or grades, must have, besides a clear, concise and correct exposition, and an extension in relation to the pupil's age, a plan for the teaching of the subject. That plan answering faithfully to the thought and experience, proved by the author

Methodology obtained a new fulcrum, the excellence of this theory being shown in practice by the results secured in the fundamental subjects.

These new methods, however, neither were, nor could be perfect, but they were logical and therefore rational and products of observation, study and actual experience in the public schools.

During the sixth year of Dr. Miller's administration, the Department of Education adopted different text books prepared in Porto Rico for its schools, and the results obtained in all the grades where used, justify their adoption, and compared with those formerly used, proved their relative excellence.

In the modern school, text books, mean method, because no book of mere information, no matter how correct and well arranged, must be introduced unless it contains the plan which, in the author's opinion, makes the teaching of the subject both possible and easy.

Good Results Secured. Perhaps if his administration had not been hindered by internal and external forces, Dr. Miller would have closed his second term by introducing a complete list of text books on all subjects, in all the grades, thus guaranteeing a method which would not only respond to the ideal type of teaching, but which would also insure positive and practical results, which is the only way to justify the enormous expense that the service of public schools exacts. Though that could not be, nevertheless, the results obtained by the Department of Education during this period constitute a real credit for the Commissioner.

New Life for the Rural School. Another of the acts of this administration is that which refers to the rural school. Opened and organized in 1900 by the First Commissioner of Education, Dr. Martín G. Brumbaugh, it did not gain fundamentally until Dr. Paul G. Miller took charge of the Department of Education in August of 1915.

Its stagnation was a sad reality, and with the advent of the new administration it began to regain its personality, and impart its influence not only to the reduced number of children attending it, but to the community where it existed, thus becoming an educational center which a rural school should be.

There was co-operation—intelligent, persistent and enthusiastic, and the end was reached. Since that time the rural school is, except in a few cases, a community center. The adoption of text books, especially prepared for the schools, also carried its influence to the rural school.

The Double Enrollment Evil. If the results obtained in the primary grades of the rural school are not as good as those obtained in the graded schools, it is due to the system known as double enrollment, which limits the daily work of each student to 50% of the time at his disposal. This evil was due to a generous impulse to meet the people's constant demand for more schools for their children.

Dr. Miller dictated orders toward the immediate elimination of the double enrollment system, in the second grade, and giving a reasonable time for its suppression in the first grade.

Much Better Results. All these measures were of beneficial effect to the general school work, and made possible the adoption of new methods of education and rational procedures for their introduction, in fact, it can be fairly said, that no other administration did as much for the Island's schools as did that of Dr. Miller, who was a functionary of clear vision of the school needs, but who unfortunately, was not always given the best advice. If he had carried out his first decision of radically and fundamentally changing the school (and he had time to do it) the progress would be superior to the existing one.

A Period of Intensity. The author, who has disagreed many times in diverse educational matters with this educator, does justice to his administration, affirming that, with the exception of Dr. Brumbaugh, who established the new system of education, Dr. Miller's administration is the most brilliant in results, although he was wrong in many points of view.

The public school had not had an equal period of intensity as it had in the second and third year of his first term. The progress was visible, though it could never reach the highest degree on account of its inheritance of error accumulated during twenty years.

Good Intentions But Some Dangerous Experiments. Such, in synthesis, is the history of the Island's public school. Assuredly there was a good intention in all this, but what dangerous experiments when we consider the material handled—the child!

The First Porto Rican Commissioner of Education. Next, the responsibilities and privileges of the Commissioner of Education were for the first time conferred on a Porto Rican, Mr. Juan B. Huyke. At this writing we are reaching the end of his second administrative year, and professional ethics prevents discussing his administration.

Conclusions. This article, long as it is, is but a brief critical examination, almost a superficial study, made necessary by the comparatively limited space, which could be assigned to any subject in a book of such comprehensive nature.

The author candidly and sincerely declares that no spirit of reproach has moved him, but rather one of criticism. The good things are almost self-evident. The bad things almost hide themselves from the watchful eye. He has made use of a cautery not for the purpose of producing pain but for curing. Of course his conclusions are open to criticism, and they may perhaps be erroneous. Nevertheless, they are the result of twenty-two years of study, observation and experience, and if erroneous, they are at least made in good faith, and offered with a good purpose.

In other words, the good sides of a system of public education need no discussion, they being self-evident, through the results obtained. A system that develops some progress, must possess some good points, no matter how mistakingly conceived or erroneously applied, the fact that some progress results is an indication that it must contain some acceptable aspects.

No Definite Educational Policy as Yet. The present system of education in the island can not be considered as the result of a series of experiments tested for a number of years, because the experimental period yet exists, as proved by the fact that so far there is no definite policy adopted, or conception reached, as to the basic principles of the best system of

education, and the best creative agent for the formation of citizens. In fact, when the reader stops to reflect, this holds true and always must hold true of education in all countries, as long as new discoveries and improvements are made, which due to the very nature of the science will always be.

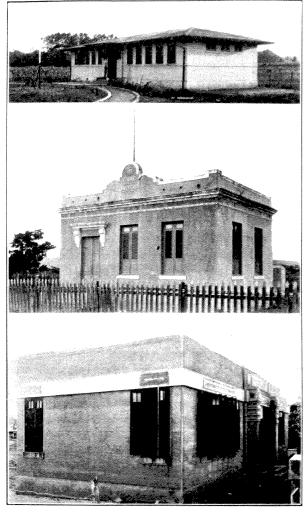
Brumbaugh Laid the Foundation. Brumbaugh reorganized the system of public school education as established by the Spanish government and laid the foundation of the future Porto Rican school, as proved by the fact, that though succeeding administrations have deviated from the path which that founder traced, the foundation was so strong, so rightly laid, that even yet there is a basis left for the island's future school.

On this basis so established, stands today the permanent edifice of all the good aspects of the present system of education in the island, consisting of the new practices and modifications accumulated and possessed by all those who beginning with Dr. Brumbaugh, have directed the work of public education.

A Resumé of the Important Steps. Lindsay by initiating the secondary and college education, provided both with a solid basis for the future, and these phases discussed elsewhere in this book, are touchstones which properly applied, test the degree of excellence of the elementary system of public education, which constitutes the foundation of the secondary and college education. All the deficiencies in preparation noticed in students of secondary schools and university departments, have their origin in the elementary school. For this reason the author has focused attention on the discovery of the defects of the primary school and pointed them out unhesitatingly.

Dexter, by eliminating the preparatory teachers, restored primary teaching to its true course; but in generalizing the teaching in English (attempted by his predecessor) he shook the system of teaching down to its foundations. Thanks to its strength, the school continued to yield good results, although of inferior quality—which seems contradictory in view of his official statistics.

Bainter, by introducing vocational education committed errors of judgment in not taking in



ESCUELAS RURALES DE BARCELONETA, JUANA DÍAZ Y SANTA ISABEL.

THREE GOOD EXAMPLES OF THE HIGHEST TYPE OF RURAL SCHOOLS.

consideration the financial state of the Insular Government and the School Boards, but established definitely this branch of modern education.

Miller, by restoring the vernacular to the teaching of the first four grades of the elementary school; strengthening the rural school and bringing it out of the static state in which it lay from the time of Brumbaugh; breaking traditional precedents with the creation for Porto Rico of a series of text books which Porto Rico required, and by acknowledging in so doing the capacity of the native teacher for this kind of production, gave new life to the system, and corrected many of the funda-

mental errors of the administrations of Falkner, Dexter and Bainter.

Summary of Facts. 1—The system of public education established in Porto Rico, follows the general lines of the systems of graded schools in the United States of America.

2—The elementary system presents two phases: the elementary graded school of the urban zone and the rural school.

3—The elementary graded school of the urban zone consists of eight grades, which comprise all the instruction on the various subjects appertaining to an elementary education. The rural school offers only a course of six years of graded teaching, and not all of them go to that extent. Only the graded school of the urban zone offers a complete elementary course.

4—In the elementary graded school, the first four grades are taught in Spanish (the vernacular of the Porto Rican child) and English constitutes a preferred special subject. The fifth grade, a transition grade, is bilingual. In this grade, hygiene and Spanish are taught in Spanish, while arithmetic, geography and English are taught in English. From the sixth grade up to the eighth, all subjects are taught in English, excepting the course in Spanish, which naturally, is taught in Spanish.

5—In the rural school the teaching is done in the vernacular of the child (Spanish) and English is considered as a special subject, up to the fourth grade. From this grade on, the same practices are followed as in the graded school of the urban zone.

6—The teaching of the English language in the first four grades of the elementary school is entrusted to Porto Rican teachers, most of whom have never lived in an English speaking country, and their knowledge of that language being acquired in the public schools, or by personal efforts, in every case, with few exceptions, the pronunciation is deficient, the oral vocabulary limited and the construction Spanish-like. The teaching in English and of English, in the fifth and sixth grades is usually in the hands of native teachers with a better preparation as regards knowledge of the English language, but in proportion, the deficiencies are the same as in the primary grades.

7—The text books used in the elementary school may be grouped in two classes: (a) Books prepared especially for Porto Rico, by experienced teachers and educationalists with thorough knowledge of the people they want to educate. (b) Books used as text books in the States and adopted in Porto Rico without any special adaptation to the conditions and necessities peculiar to the people.

The text books of the first group are those used in the first four grades of the elementary school, those of the second group are generally used in the higher grades.

8—A limited number of teachers from the States co-operates in the work of the public school, and are in charge of the teaching of English and of some subjects in English in the higher grades, usually in the seventh and eighth. Almost all these teachers lack knowledge of the native language of the child—Spanish.

A Rational Plan Suggested. 1—The author believes that the system of elementary graded schools may offer a course applicable to the rural schools as well as to the graded schools of the urban zone, with the possible addition of a theoretical and practical course of agriculture in the rural schools. The least to which a child is entitled in a democratic community, is to receive a complete elementary education and for this reason, the course of study of the rural school must be of the same scope as in the schools of the urban zone with the exceptions above noted.

2—Teaching in every elementary school should be done in the mother tongue of the child. At least in all those grades in which basic knowledge is to be acquired of the fundamental subjects. The acquisition of new knowledge especially by a child presents serious obstacles, and requires a great effort of perception, understanding and representation. The difficulties inherent to the attainment of acquisition of knowledge should not be increased by an imposed one-the effort necessary to overcome the resistance offered by the means of instruction if this is done in a language foreign to the child. The vernacular is a short, straight road, leading to the desired goal. Any other language used as a means of instruction is a long, curving road, which most of the time consumes the strength of the student before he can reach the desired end.\*

3—The English language, not only because it is the national language but also because it is the most universally spoken, should receive preference in all the educational institutions of the island, and be taught to the child from his start in school. But it must be taken as a special subject and taught by teachers having a thorough knowledge of it, and adequate professional preparation. The text books for reading, as well as for the study of language and grammar, should be especially prepared for Porto Rico by educators who know the island and its institutions, are familiar with the people, identified with their usages, and saturated with the environment lived in, which is the only one suitable to Porto Rican life. Every text book, at least in the elementary school, should be subordinated to the child's needs. Authors and teachers are simply factors in the work of education and all should be subordinated to the human object of the educationthe child. Without knowing the child, in all his manifestations, morally and physically, it is impossible to devise the best plan suitable to its education.

4—Teaching of the vernacular as a language, in its fundamentals, may serve as a basis for the teaching of English to our children. The general grammatical principles are universal. The notion of what a noun is, is the same in all languages. The same is true of the adjective, the verb, adverb, etc. The differences between languages consist in those peculiar forms of speech which constitute the idioms of a language. These idiomatic forms give personality to a language and outline its physiognomy. If the premise with which the author started this conclusion is accepted, a plan of study then should be based on the principle of co-ordination of both teaching of English and of Spanish grammars.

5—The teaching of the English language is at present well directed in the primary grades

—the exclusive oral teaching done in the first two grades taking the place to some extent of of the knowledge which the English speaking child brings from home and street on entering school and which the island's Spanish-speaking children lack.

The amount of work at present prescribed for two years though, is so large and entails such difficulties, that it should be distributed among the first three grades. The best plan would probably be to make oral teaching compulsory, through all the eight grades. The oral language is the means of communication most widely used by man in life, and the school activities should be directed to attain its perfection.

The teaching of English reading is good as it is required today. In the third grade the child reads and writes with relative ease its mother tongue, and this aids greatly in learning English reading. After two years of oral English teaching, the new words that the child may find in his first book of English reading are no longer difficult to him.

The teaching of English itself may begin in the fourth grade, and for this purpose, it should be fundamentally based, on those general principles of grammar which the child acquired when he started the formal study of his own language in the third grade, English idioms, their form, personality, physiognomy and their spirit—the child takes and assimilates from his reading and oral exercises.

Such is, in synthesis, omitting undoubtedly important details, a plan that the author believes to be rational for the teaching of the English language to the island's children. Properly co-ordinating the factors that enter in the development of this plan, the results attained should be superior, in quality and quantity to those yielded at present by public schools.

6—The elementary school course may well be divided into primary grades and higher grades in preparation for advanced studies. The primary grades should be the first six grades, considering the first five grades as devoted to the acquisition of fundamental knowledge, and the sixth grade that in which this knowledge is first organized and applied.

<sup>\*</sup>The limitations of this critical essay do not allow of a greater amplification of these statements, but many of the reasons here omitted are known to the public by the discussions which once in a while have taken place both in the press and on the public stand.

In all of them the course of study should be universal, for all pupils, as basic education admits of no reduction.

As higher grades, preparatory for higher studies, are the last two of the elementary system, the seventh and eighth, in them vocational teaching must be started. At this stage the teaching of specializations begins to be substituted for the teaching of generalizations. To attain this end, the teaching in these two grades must be a harmonic ensemble of scientific, commercial and industrial tendencies. Such tendencies leading to the four great fields of activity in which men exert themselves in modern society. Vocational education, harmonically initiated, prepares the youth for the profession which by temperament and disposition, they desire to make their lives' work.

7—With the elementary school organized, according to the above conclusions, the secondary school must have three aspects—scientific, commercial and industrial. With such preparation a sure success may be foreseen for the young man who thus prepared goes to a college or an art academy to perfect himself as a useful tool.

8—The whole school system should be surrounded by an environment of spirituality, and this is only possible through the adoption of a complete plan for the teaching of morals

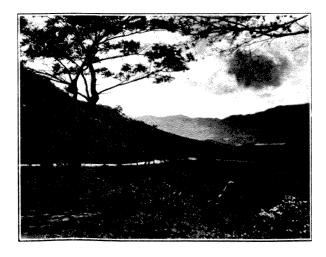
throughout all the courses of the elementary and secondary schools.

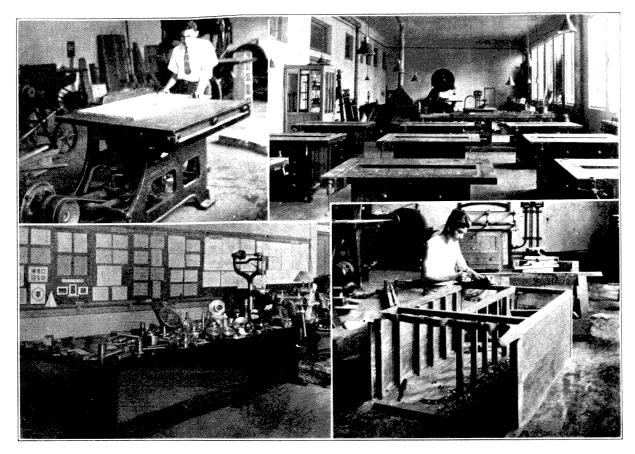
9—All the teaching, plans, tendencies and factors entering in school work, must be coordinated, in order to obtain a harmonic and integral development of the child; so that its education may comprise those fundamental, basic elements of every system of public education, viz. the physical, the moral, the intellectual, and the aesthetic.

10—The teacher, the only intelligent factor in the work of education, must have a well-grounded and finished education, and an adequate professional training.

Every prospective teacher, before being admitted to a normal school, should be required to present credentials of having finished successfully the elementary and secondary courses. In addition to this, a careful selection should be made from among those who have fulfilled academic requirements and their public and private lives should also be investigated before admittance.

The child is the most precious treasure of a country, and no amount of care taken in the selection of his education is too great, if it is desired to keep him physically strong and morally clean, and if his creative faculties are to to be properly stimulated to make of him a man useful to himself, to his family and to society.





TALLERES DE LA ESCUELA INDUSTRIAL, SAN JUAN.—BUILDING GOOD PRODUCTS AND BETTER MEN.

### **Industrial Education**

By Herman Hjorth, B.Sc.,

Director of Technical Work, Román Baldorioty de Castro Graded and Technical School. Former Teacher, Speyer School, New York and United Neighborhood Guild, Brooklyn. Professor of Manual Arts, University of Porto Rico, General Supervisor of Manual Arts, Porto Rico. Superintendent of Buildings, University of Porto Rico and Inspector of Buildings, Interior Department, Porto Rico.

Manual training was introduced in the public schools of Porto Rico in 1913 through the efforts of Commissioner of Education E. M. Bainter. Although a few desultory attempts had been made before, this was the first organized movement carried out on a big scale to introduce it in practically every town of the island. It is still carried on to more or less extent in the leading cities and towns, San Juan, naturally, leading them all in equipment and facilities.

Built on a Historical Site. Román Baldorioty de Castro Graded and Technical School, the best and most modern school building of

its kind in Porto Rico was erected and equipped in 1918 by the municipality of San Juan. Quite an interesting bit of history is connected with this school. On the site it now occupies stood the first convent in Porto Rico. This old building was erected in 1636 for the Franciscan sisters and was occupied by them until 1838.

During that time instruction was given in Grammar, Spanish, Latin, Philosophy, and Theology. After having served for more than 200 years as a convent, the building was converted into barracks for a Spanish regiment of artillery and continued to be used as such until

the American occupation in 1898. A few years after that the old building was used as a school until it was torn down in 1916 to make room for the present structure. Although the old building has entirely disappeared the traditions connected with it have not, and just as a good many of its sound timbers were incorporated in the new building so we hope that many of the fine and sound traditions of the church and of the Spanish "conquistadores" will be incorporated in the youth now attending this school, so that they may leave it with high ideals and a determination to conquer new worlds.

Aim and Courses Offered. The school was occupied in the fall of 1918. The two upper floors are used for class rooms only, while the whole of the lower floor is occupied by the shops. Instruction is given to boys in the 7th, 8th and 9th grades, and apart from their academic work, which constitutes two-thirds of their time and follows the requirements of the Department of Education, the following technical courses are offered: Mechanical Drawing, Woodworking, Plumbing, Machine Shop Practice, Printing and Electric Wiring.

In general the aim of industrial training in Porto Rico is to teach boys to enter the various industries in their community with some definite preparation for earning a living. They are not trade schools and do not claim to turn out finished mechanics. It is intended rather to find out what trade, if any, a boy is best fitted for and then give him such a foundation as will fit him to enter the trade as a superior apprentice.

In particular the objectives sought in the several courses are as follows: Mechanical Drawing is given to familiarize the student with the universal, graphical language of the world. The importance of mechanical drawing cannot be overestimated as no industry can be carried on without the aid of drawing and no workman can master his trade or even be considered "skilled" without the ability to read a drawing and interpret it correctly. It follows, of course, that all the work in the shops is done from drawings, so that in this way the drafting room forms the connecting link between all the shops and plays a vital and im-

portant part in the organization of the Technical School.

It is the object of the course in Woodworking to give a boy a thorough knowledge of the fundamental processes underlying all construction in wood. Most of the time spent in the woodworking shop is devoted to cabinet-making, and the older boys are able to make very creditable reproductions of antique furniture. There is a great demand in Porto Rico for fine cabinet-makers as well as for carpenters, who have a technical knowledge of their trade and are able to work independently from blueprints. There is also an opportunity for young men with technical preparation to become inspectors of buildings, contractors, etc.

The aim of the course in Plumbing is not only to teach the trade well, but to instill into the mind of every student that pure air, pure water, modern sanitary fixtures, good drainage and sewage disposal are safeguards of health, absolutely indispensable to modern civilization. It can readily be understood that the need of sanitation in a tropical country is of paramount importance, and as good plumbers are not too abundant in the Island this course fills a real need. Instruction is given in all phases of the work and practical installations are worked out in the shop.

Wide Demand for Skilled Mechanics. Although Porto Rico is an agricultural rather than a manufacturing country, machinery is nevertheless used to a great extent in farming, irrigation, sugar mills, generation of light and power, automobiles, trucks, railroads, Such a wide use of machinery naturally results in a constant demand for skilled mechanics and to that end the course in Machine Shop Practice aims to give the boys a general rounded-out knowledge of the most important machine tools together with the fundamental principles underlying the proper management and repair of machinery, and further as the island's decided industrial development is assured, due both to the market she affords and the advantages she possesses for the introduction of new industries, as so fully outlined in another article in this book, this demand for mechanics will constantly

greater. Besides the regular exercises the work embraces the construction of machinery and motors from castings, repair work, etc.

Description of Day and Night Schools. The work in the Printing Shop is full of interest and like other courses in the school aims to give the boy a general and thorough knowledge of the fundamentals of the trade. A great many cards, forms, letter heads, envelopes, etc., are printed for the school system, besides a bi-monthly bulletin describing the work in the district of San Juan. An interesting feature of the work of this department is the publication of a weekly school newspaper.

Printing is one of the most important trades in Porto Rico. A great many newspapers are published daily and business is increasing so rapidly that there is a constant demand for competent printers who can do high grade work and keep abreast of the ever-changing and exacting requirements of the profession.

The course in Electric Wiring has only recently been added to the curricula offered by the Technical School. The work is therefore only in the elementary stages as yet, mainly dealing with installation of bells, annunciators, telephones and the telegraph. A radio receiving station was built on the roof of the building this year in conjunction with the classes in Plumbing and Machine Shop Practice.

In addition to this work a very successful night school with a constantly increasing enrollment has been maintained during the past four years. The courses offered are the following: Mechanical Drawing, Architectural Drawing, Machine Shop Practice, Arithmetic, Plumbing, Linotype Operation, Electric Wiring and English. These courses meet in part that desire existing among our best working people to acquire technical information relating to the line of work in which they are engaged. The instruction is entirely free and open to any one who has ambition and energy enough to forge ahead and progress.

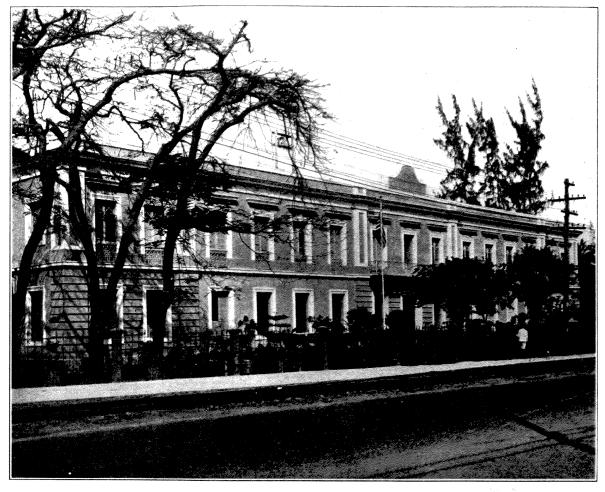
Financial Support and Equipment. The Baldorioty de Castro Technical School is sup-

ported entirely by the Municipality of San Juan at an annual cost of about \$25,000 and is equipped with modern up-to-date machinery and tools worth a similar amount.

New Buildings and Increased Facilities to be Provided. As the present quarters have been overgrown the Municipal Commissioner of Education, Mr. José González Ginorio, is already having plans prepared for a new industrial school devoted exclusively to the training of boys and young men in the various branches of industry. In this school there will be installed a steam plant to generate all electric current used in the building thereby giving the students an opportunity to learn the elements of steam and electrical engineering. In addition to the courses already offered there will be shops for the teaching of Auto-Mechanics, Plain and Ornamental Sheet Metal Work, Forging, Bookbinding, Lithography, Photo-Engraving, Electrotyping, Pattern Making and Foundry Work, Industrial Chemistry and Physics. The boys will spend fifty per cent of their time in the shops, twenty-five per cent on related work as drawing, shop mathematics, physics and chemistry and the remaining twenty-five per cent on non-vocational work.

Industrial Education a Vital Need. It is to be hoped that other municipalities may be enabled to follow the lead and forethought of San Juan, either through their own efforts or with the aid of the Insular Department of Education, and build and equip special industrial schools rather than rely on short manual training courses for Industrial Education is certainly needed in Porto Rico.

Author's Note: The author desires to direct attention in The Book of Porto Rico to the great practical work done for the children of that island by the Baldorioty Graded and Technical School. And also to take this opportunity to direct the attention of the large machine manufacturers of the States to the fact that here is a place where machines can be installed and thus, not alone prove of value to the students, but to themselves, by making those who later on will have a voice in the purchase of machinery for the island's new industries familiar with the strong points and marked advantages of their products at a time when the human mind is most retentive of information gained.



ASILO DE NIÑOS, SANTURCE.—ORPHAN ASYLUM AND SCHOOL.

## Orphan Asylums

### Their Origin, Functions and Importance

By Carlos A. del Rosario, Ph.G.,

President of the Examining Board of Pharmacy of Porto Rico. Former Director of the Boys' Charity School.

A fundamental duty of humanity commands us to help needy orphans. How? By establishing asylums where they can be taken care of and educated.

In practically all countries there are institutions to shelter needy orphans. In England a special property tax is levied which produces about sixty million dollars annually to be employed in public beneficence, especially for the maintenance of numberless orphan asylums. The Girard College, at Philadelphia, founded in 1831 by the American philanthropist, Mr.

Stephens Girard, cares at present for about 2,000 children and has property valued at \$40,000,000.

Porto Rico's Two Orphan Asylums. There are two orphan asylums in Porto Rico supported out of the Insular Treasury, the Boys' Charity School and the Girls' Charity School, both located at Santurce, San Juan.

Governor Santiago Méndez Vigo ordered the establishment of a "House of Beneficence for both males and females" at San Juan, through a decree dated January 4th, 1841. To build it

taxes were levied, theatrical performances given and popular subscriptions raised. This building was started August 6th, 1842 and finished in 1847.

It is situated at Campo del Morro and is now used as an Insane Asylum. Up to 1899 the insane people were cared for under the same roof as the children, though in separate quarters. "The Hope of the country and the rubbish of society," lodged together!

In 1899 under General George W. Davis' Military Government the boys were taken to the present quarters at the Boys' Charity School Building formerly occupied by the "Instituto de Segunda Enseñanza" of the "Padres Escolapios" and the girls to the Girls' Charity School formerly the home of "El Colegio de las Madres." There were two hundred children in these institutions.

The Boys' Charity School. The Boys' Charity School has a capacity for four hundred with an annual budget of \$110,461.65; the Girls' Charity School shelters 300 and expends \$75,-465.25 a year. Both establishments are supported out of public funds, have the proper personnel and equipment and are conducted on modern scientific plans.

The children are admitted from the fifth to the twelfth year of age, and remain until about eighteen, that being the age for discharge. In that relatively short period they acquire much useful knowledge as the instruction given them is three-fold: academical, industrial and in physical culture.

The academical instruction in the Boys' Charity School reaches to the eighth grade of the course of studies prepared by the Department of Education of Porto Rico, that is: Arithmetic, Geography, Native and United States History, Spanish and English languages, Hygiene, Civics, etc., and the industrial instruction comprises carpentry, cabinet work, masonry and the manufacturing of cement objects, plumbing, tailoring and shoemaking. The Boys' Charity School has a military organization with a battalion of six companies with their officers.

The Girls' Charity School. At the Girls' Charity School, besides the primary instruction up to the eighth grade, there is a two-year commercial course including bookkeeping, typewriting and shorthand and complete instruction in Domestic Sciences, such as cooking, sewing, embroidery, etc.

These institutions rescue 700 children from the misery of poverty and prepare them for the struggle of life.

The property of these institutions is valued at \$500,000 and their maintenance costs about \$200,000 annually.

# Instituto Universitario "José de Diego"

By Agustín Martínez de Andino,

Superintendent "Plazuela Sugar Co." Professor of Chemistry and Sugar Manufacture in the "José de Diego Universitarian Institute."

At the beginning of the year 1915, the distinguished José de Diego, then Speaker of the House of Delegates, introduced his greatly discussed bill providing for teaching in Spanish in the public schools of Porto Rico. Supporters of the bill were numerous and highly enthusiastic. Among them were the students of the San Juan High School, of the University of Porto Rico, and of many schools thruout the Island. As a consequence of the very important legislative debate over this bill, in which the superb eloquence of José de Diego

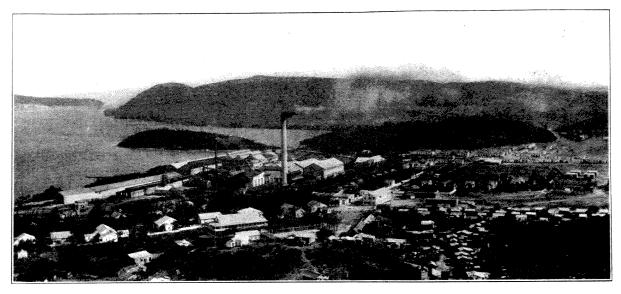
established the natural convenience of the measure, the "José de Diego" High School was founded.

Inauguration: In the middle of March of the same year the distinguished gentlemen Manuel Quevedo Baez, Rafael López Landrón, Teodoro Aguilar Mora, Eduardo Géigel and Vicente Balbás Capó, met in a memorable assembly, and resolved to establish a center of learning inspired by the principles of the bill in question. At the end of the month a High School was inaugurated, bearing the

name of the eminent patriot, its purpose being condensed in the motto: "Teaching in Spanish". "Teaching of English".

Inspired by the best of wishes and encouraged by public opinion, the directors proceeded to establish the new institution on a firm basis, and in August 1915 decided to reorganize it and to add thereto the following

This building was a most valuable acquisition to the Institute. The third and fourth stories were reserved for lodgings, and there were soon half a hundred enthusiastic youths from the different towns of the Island, and some from other countries, lodged in the new quarters. The second story was devoted to class-rooms, and the laboratories and assembly



CENTRAL GUÁNICA, SOUTH PORTO RICO SUGAR CO.-A MAMMOTH INDUSTRIAL INSTITUTION.

departments: a High School, comprising scientific and commercial courses, a law department, first year, and a department of sciences. It was also decided to change the name of the school to "JOSE DE DIEGO" UNIVERSITARIAN INSTITUTE, by which name it has been known since that date.

Equipment and Student Body: The Institute then occupied a frame house on Ponce de León Avenue, at Stop 21. Increased enrollment and the incessant demands of parents residing outside of San Juan for the establishment of a department for resident scholars. where their children might be comfortably lodged, forced the directors to decide to transfer the school to more spacious quarters, for which purpose they leased the building formerly occupied by the Hotel Nava at Stop 15 on Ponce de León Avenue. This is one of the most central points in Santurce. It is continually swept by sea-breezes, and offers all the comforts that the most refined taste might demand.

room were established on the ground floor. Here it was that true educational work commenced. The curriculum was modified, teachers of well-established reputation and experience were obtained, and to the great joy of the country our first graduation exercises were held. Nineteen youths received their diplomas at this time.

The work done by the Institute during the years 1916, 1917 and 1918, under the presidency of Dr. Manuel Quevedo Báez, is worthy of the highest praise. Seventy-three students were graduated during this period, all of whom left the Institute strong of mind and sound of heart, full of initiative, and well prepared to live the life of true citizens.

Technical School of Sugar Manufacture Chemistry: On initiative of Professor Francisco López Domínguez, with the co-operation of the Board of Directors, in August 1918 a new department was created. The Technical School of Sugar-Manufacture Chemistry. Our

studious youth very promptly realized the great advantages offered by this new department, and they soon came from all parts of the Island. The first graduation from this department took place in 1920, five young men being graduated. The number of graduates is now seventeen, and the work proceeds in this department just as in all the others. All of these sugar-manufacture chemists are now employed in sugar factories in Porto Rico, Cuba, San Domingo and Venezuela, where they are rendering efficient services.

New Quarters: Because of the earthquakes of October 1918, it became necessary to transfer the Institute to the commodious building owned by the Finlay Succession at Stop 23, Ponce de León Avenue. Here the work goes on with the same enthusiasm, though the retirement, because of ill health, of Dr. Manuel Quevedo Báez from the presidency, was a matter of regret. The well known public man, Mr. Rafael Diez de Andino, was chosen to fill the vacancy, and under his wise direction the Board of Directors was reorganized and the Institute was incorporated on December 20th, 1921, under the name of "JOSE DE DIEGO" UNIVERSITARIAN INSTITUTE, INC.

School of Pharmacy: During the same year the School of Pharmacy was established under the competent direction of Mr. Luis G. Hernández, a well-known professional man, and ex-Professor in the University of Porto Rico. And no doubt the graduates of this new department will be as successful in practice as those of the other departments.

Present President: At the present time the Board of Directors is presided over by a native pedagogue, Mr. José González Ginorio, Municipal Commissioner of Public Education of the city of San Juan. Mr. Ginorio having previously for several years held the office of General Superintendent of Spanish in the Insular Department of Education.

Plans for the Future: The "José de Diego" Universitarian Institute enjoys solid prestige in Porto Rico, in the United States and in the other Antilles. Its graduates are admitted to the best American universities and colleges, where they have given full evidence of their excellent preparation. But what about the future? The directors have already decided to issue mortgage bonds in the sum of fifty thousand dollars, to be applied to the construction of the Institute's own building, which shall meet all the requirements of modern pedagogy. Will Porto Rico aid in this undertaking? Can a more suitable monument be erected to the memory of that Porto Rican genius, José de Diego? We doubt not that Porto Rico will help in thus honoring one of her most distinguished sons.

# El Colegio Puertorriqueño de Niñas

### A Modern Educational Institution

By María Fernández García,

Special teacher of the blind, Blind Asylum, Ponce. Formerly teacher of Spanish literature and composition, El Colegio Puertorriqueño de Niñas, San Juan.

Some ten years ago a movement for the establishing of a private school for girls in the capital city of the island, patterned strictly on the best features of the modern public school, was initiated by Mrs. Celia Cestero de Ruiz Arnau. This movement led to the founding on June 30th, 1913, by a group of public spirited, progressive and enthusiastic ladies, of that center of learning so famous

the island over today—the Colegio Puertorriqueño de Niñas.

The first school year of this Porto Rican College for Girls opened on September 22nd of that year. The course of studies offers the primary and grammar school grades and the High School course, including commercial and scientific courses, besides several special courses on various special subjects.



DÍA DE GALA EN EL COLEGIO PUERTORRIQUEÑO.—GRADUATION IS A NOTED EDUCATIONAL AND SOCIAL EVENT.

The first Board of Trustees to whom was entrusted the initial constructive work of this important movement consisted of Señoras de Ruiz Arnau, President; María Buxó de del Valle, Vice-President; Sara M. de Belaval, Treasurer; Eduarda M. de Urrutia, Secretary, and María Luisa B. de González Martínez.

After careful study of the problem and outlining a plan of campaign, the President and Secretary were apointed a committee to raise the necessary funds, and, thanks to the efficient work of these ladies, the generous cooperation and financial aid of many prominent citizens and important commercial corporations was secured and thus the needed school promptly became a living reality.

Porto Rico owes much to all those who contributed by their labor and funds to the creation of the college, and the names of the donors, as well as those of the charter mem-

bers, were gratefully recorded in the minutes of the first annual meeting of the Board, which were published in 1914.

No article concerning the Colegio Puertorriqueño de Niñas would be complete without mention being made of the special group of public-spirited business and professional men who, in addition to extending valued financial aid to this college, have ever been eager to further its interests and its important work in every way open to constructive brains and kind hearts. Among this group of generous men were Manuel del Valle Atiles, Francisco Matanzo, Gabriel Soler, F. del Valle Muñoz, R. Ruiz Arnau, P. Gutiérrez Igaravídez, E. García Cabrera, Pedro de Aldrey, M. Sánchez Morales, J. D. Stubbe, H. Belaval, I. González Martínez, R. Gandía Córdova, Luis Muñoz Morales, J. Labrador Viñals, M. Rodríguez Serra and Alvaro Padial.

Since its inauguration the Board of Directors has been presided over by Sras. de Ruiz Arnau, de Rodríguez Serra, de Matanzo y de Torres in the order named, and at present Mrs. Estela Cestero de Stubbe most eáciently presides, and the untiring zeal and constant wisely directed interest always displayed by such distinguished members of the island's society in behalf of their beloved institution has always been most marked.

With such great devotion displayed by so many of Porto Rico's leaders of commerce and society, it is most difficult to specify, but it is felt that a general census of the friends of the college would indicate that for their great devotion and unselfish expenditure of time, besides the presiding officers, Mrs. del Valle and Mrs. Matilde de Soler deserve special mention.

It would seem that destiny which shapes the progress of all progressive movements was most kindly disposed in all respects to the island's beloved girls' school, and especially in the wise selection of the teaching staff, as so well represented by Miss Josefa Noel, the Principal of the College, unanimously chosen because of her exceptional ability to plan and direct the activities of an institution, which because of the charming buds of womanhood it was designed to develop, demanded the most delicate skill, great tact, educational ability and charming personality.

Ten years is a short time to accomplish all that the Colegio Puertorriqueño has, and year by year its reputation and influence expands, just as do the characters and accomplishments of all its fair graduates. Today two hundred and fifty of the island's daughters, of whom ten per cent enjoy scholarships founded by the college, receive instruction and education at this girls' school first dreamed of by Mrs. de Ruiz Arnau, and which has been made a vital reality by the unselfish devotion of so many of the island's leaders of society. Of that number of pupils, twenty are received as boarding students, thus rightfully extending its great influence throughout all the island.

The initial teaching force of this progressive institution was composed of a brilliant group of Porto Rico's gifted teachers—Srtas. Celina Serbiá, Angeles Daubón, Edna La Ross and Joaquina Martínez, who have been largely responsible for the marked success of this institution.

Today this progressive school has a building in residential Santurce which, though considered as temporary quarters, is ample for present needs, but Drs. Francisco Matanzo and M. del Valle, Mr. Gabriel Soler and others, all interested and tireless workers for the interests of the college, never for an instant lose sight of the fixed idea of securing a permanent location for the school with sufficient space to care for its assured future development.

In the second stage of the expanding life of this institution it has been fortunate in possessing many most brilliant teachers—educators who have rendered most valuable service, among them Miss Augustina Musa, one of Porto Rico's most eminent teachers.

Among the island's most important affairs each year is ranked the graduation exercises of this school—an affair which is a true exponent of Porto Rico's social life and culture, and as the years pass each one further enhances the prestige and progress of the Porto Rican College for Girls.

At graduation, as on all other festal occasions, a feature is always the singing of the beautiful hymn especially composed for the school by the noted Porto Rican composer, Don Rafael Balseiro, with words by that famous educator, Mr. Manuel Ruiz Gandía, the words and music of which are alone exceeded in sweetness by the fresh, girlish voices that sing them.

Another incident of graduation day is the awarding of the Ruiz Arnau gold medal—a medal of beautiful design for which the school is indebted for the beautiful thought of Mrs. Ruiz Arnau at the time of her departure from the island in 1918 to take up her residence in another portion of that nation of which Porto Rico is the tropical daughter—the United States. This medal is given to that lucky maiden, who on graduation is considered to have best complied with certain conditions of attendance and study.

In all respects the Colegio Puertorriqueño de Niñas reflects both the best of Porto Rico's ancient Spanish culture and the progressive spirit which both made the United States possible and made it the great world factor for educational advancement which she is today, and just as the United States is a successful exponent of the necessity for the very best education for women, so is the Colegio Puertorriqueño de Niñas.

### The College of Agriculture and Mechanic Arts

By Charles E. Horne, Ph.D.,

Dean, College of Agriculture and Mechanic Arts. Member of several professional and scientific associations.

The College of Agriculture and Mechanic Arts located at Mayaguez, was first established at Río Piedras as a purely agricultural school, but reorganized and transferred to its present location in 1911.

History and Scope. The courses of study were at first made to conform to the natural limitations of the public schools, but have gradually been advanced until at present only subjects of collegiate grade are offered and high school graduation is a prerequisite for unconditional entrance. It has always been the aim of the authorities to have a college equal in grade to similar institutions in the States, and efforts have therefore been made to arrange the courses of study along similar lines, to provide a well trained faculty, and to demand a good quality of work from every student.

The different departments of the College are Agriculture, Architecture, Civil Engineering, Chemical Engineering, Electrical Engineering, Mechanical Engineering, and General Science. The time required for completing a course in any of these departments, except in Architecture, is four years. The latter department was inaugurated in 1921 with a two year course, but it has been decided to add a third year during 1923-24, and if the demand is felt in the future, it will doubtless he made a standard course along with the others.

Staff and Building Equipment. The teaching staff is composed of twenty-three members who have been chosen because of special preparation in their respective fields of instruction.

The College has made excellent progress in

the construction of buildings and the acquisition of equipment. The two buildings in which nearly all the instructional work is done are of reenforced concrete, having large well lighted and ventilated class rooms, together with the necessary offices and store-rooms. One of these contains the administrative offices, the library and seven class-rooms; the other with fifteen rooms, exclusive of offices and store-rooms, is used for laboratories and instruction. Both of these buildings are thoroughly equipped with modern furniture and apparatus.

The shop is a large frame structure containing excellent equipment for carpentry, wood turning, pattern making, forge, foundry, and machine work.

The barracks and mess hall, originally erected for the Students' Army Training Corps in 1919, is now used by the Military Department of the College and for laboratories by certain Engineering Departments. The barracks provides also one large room for assemblies

In addition there are barns for cattle and horses, a dairy laboratory, farm shop, greenhouse, plant house, hydraulic laboratory, and other smaller buildings for agricultural purposes.

Recent Appropriation for Improvements. During the last session of the Legislature three hundred thousand dollars were appropriated for the College to purchase additional land and erect other buildings. A beginning has already been made in the construction of an engineering building. In 1920 a large boiler, engine, and dynamo were purchased to be used

in connection with this building and these have already been put upon their permanent foundations. Efforts are being made to have the building completed as soon as possible.

In so far as the buildings will permit, it has been the policy of the College to provide all the equipment necessary for a modern institution of this character. Since the completion of the Degetau Building in 1921 a large sum of money has been spent in furnishing laboratory equipment, for agronomy, animal husbandry, botany, chemistry, horticulture, pathology, physics and zoology.

Affords Distinct Advantages to Youth of Other Countries. We believe that the College is in a position to offer distinct advantages to the youth, not only of Porto Rico, but of adjacent islands and of the countries of Central and South América. This is an excellent opportunity not only from an educational point of view, but also from a social and political. The College offers to the youth outside of Porto Rico, advantages which they do not have at home; their presence here would help to strengthen the friendship between the different nations of the New World which is so important in these days of discord in the Old World.

To those who are interested in education we extend a most cordial invitation to visit the College. We wish all such to know what we are trying to do. Perhaps you have sons and daughters to educate; if so, we wish you to consider the advantages of the work here. Perhaps we can be of service to you in other ways; you may have some problems in con-

nection with your work which some one here can solve; if so, we shall be very glad to help you. The College was established to be of service to all who may profit by what it has to offer; we hope that we may be able to fulfill this purpose.

Seeks Aid to Assure Further Development. To the people of Porto Rico we appeal for assistance in making the College a larger and more useful institution that it may render a greater service. While we are proud of the progress it has made in the few years of its history, there is room for much growth. Since the world war the growth of education institutions in the States in many instances has gone forward by leaps and bounds. To meet the increasing demand for educational facilities large sums of money have been spent to provide equipment and secure the most expert teaching staffs. This demand has brought home to the American people the importance of adequate salaries for the teachers for all the schools of Porto Rico. It is extremely difficult to get teachers who are well trained for the salaries which are being paid here. Teachers already here become restless and This is especially true in the dissatisfied. College because the teachers are prepared to do work in other fields which offer better salaries. We sincerely hope that the situation will be realized by all friends of education, and that means may be provided to remedy it. The interest manifested in education gives us assurance that means will be provided for the continuance of the work already begun by Porto Rico's most beloved educational institution

### The University of Porto Rico By E. Fernández García, B.Sc., M.D.,

Editor of "The Book of Porto Rico."

Nearly a fifth of a century ago this University was founded by Dr. Roland P. Falkner, who brought to the island wide experience gained as a professor in various institutions of learning, by adding to the Normal School, already established by Mr. Martin Brumbaugh, the College of Agriculture. Later, for certain reasons, that College was transferred from

Río Piedras to Mayagüez, where it continues to grow, always keeping its close association with the University, both institutions being under the same board of directors.

The University, as it now exists, is composed of four main departments, each organized individually, but in harmony in all their functions, and all under the direction of the Dean of the University. These departments, each with their respective directors, are:—Normal School, College of Liberal Arts, Law School and School of Pharmacy.

To those students who successfully complete the prescribed four years' course, the Normal Department confers the title of B.A. in Education; the College of Liberal Arts the degrees of B.A. or B.Sc., according to the course taken; the Law School the degree of LL.B.; the School of Pharmacy that of Graduate Pharmacist or Pharmaceutical Chemist, the former to those successfully completing the two years' course, the latter for the three-year course in Pharmaceutical Chemistry; the Normal School also offers special courses leading to the licenses of Principal Teacher and Rural Teacher in public instruction.

The instruction given in the University in the main is equivalent to that of the same class of schools in other countries, especially of those of the United States as a whole, and its graduates are admitted to higher courses in many universities of the United States.

Though the routine work of the University is comparatively satisfactory, it would seem as if academic spirit does not exist to the extent one would naturally expect, and this holds true, apparently, as much in the professors as in the student body. Go to any University town throughout the Union and invariably you will find the local university or college a live, vital, constructive part of the city and state in which it is located—"Our University," means something of both affection and veneration to those among which it lives. University of Porto Rico, on the other hand, seems rarely to be spoken of outside of its immediate vicinity, and the love and enthusiasm that predominates among both student and graduates of the large educational centers, as well as the respect and confidence that such institutions invariably inspire, seems conspicuous by its absence. It would seem as if both the University and its faculty, by keeping themselves aloof and foreign to the needs of the community, have created emptiness around themselves. That while in Porto Rico, they are not of Porto Rico.

This, as never before, is the Age of Service

and the constant pursuit of improvement. And our University does not seem to be endowed to the extent one can rightfully expect with the modern spirit of pursuit, that constant desire to contribute to the very utmost of one's ability to the increasing of pure and applied science, and the finding of solutions for scientific, social and civic problems that pertain to the life of the community they serve. The noble spirit of service and fulfilment is vital to the growth of any institution, and hence necessary to be inoculated in our University.

The alumni of any institution are an important factor of its life, their lack of interest or participation in its program is a source of lessened vitality and development. What influence and participation have its graduates in the program and direction of the University of Porto Rico? Is it that they are not convinced of the wide influence and aid which the alumni associations of the great schools of the States exercise? Is it that the Porto Rican students feel less love and veneration for their Alma Mater.

Don't forget, Alumni of the University of Porto Rico, that the good name and respect that your Alma Mater inspires, is the name and respect that you will hold as its sons.

Remember this is the age of science, and to meet the demand of both the age and of the purpose for which she was created, certainly these four things are necessary for your university—the University of the Island:

First: To come into closer contact with the people of Porto Rico, in order that they will be willing to contribute to her maintenance in proportion to their resources. Second: That facilities for research be provided for it as an inexorable law that he who does not progress, recedes. Third: That the faculty should feel that they hold permanent positions as long as they live up to the highest standards of their posts. Fourth: As those who have the interest and progress of the University most at heart are its graduates, an enthusiastic Alumni Association is the principal factor in the betterment of the University.

In this way the University of Porto Rico will be in far better position to fulfil the high mission which the people entrust to her.



DEPARTAMENTOS "NORMAL" Y DE "CIENCIAS", UNIVERSIDAD DE PUERTO RICO.

A GREAT UNIVERSITY IN THE MAKING.

### Pan-American University

By Eugenio Fernández García, B.Sc., M.D.,

Editor, The Book of Porto Rico.

When You Follow the Teachings of Experience, You Build on Solid Rock.

In the full blossom of its civilization, Asia, composed as she was of people of low cultural development and governed by semi-divine emperors, whose personal ambitions increased in proportion to the power they possessed over humble and semi-conscious masses, almost exclusively devoted itself to warfare or mystic practice. Brilliant rays of civilization were thus wasted either in cruel warfare or in sterile religious sacrifices.

Fortunately, from their mysticism came the happy inheritance of their immortal religions; while from their unproductive warfare we glean through the legends of its past grandeurs this convincing teaching—through force of arms people secure but self-destruction.

Europe, with her feudal and monarchical systems of government, has but almost repeated the same sad scene. Though the European people, more cultured and less submissive, and enlightened by the torch of science, largely modified but did not radically eradicate ill feeling and enmity among themselves. Hence all their boasted civilization proved insufficient to prevent the staging of the recent holocaust,

that great, world-wide war, that shook modern civilization to its foundations, and whose final results none can foretell.

The American Era: Today a new era dawns—one in which America is destined to serve the world as teacher and guide in international relations, just as but yesterday she served mankind as "the cradle of liberty and the haven for the oppressed of the world."

Anglo-Saxon America, peopled by men whose ambition was the free exercise of religious beliefs and personal freedom, men in the large part of humble extraction but of great heart, by their lives set an example for the nations which they founded.

Two Distinct Racial Groups: To Latin America, at the beginning, there came a throng of descendants from proud, noble families of the old houses of Castile, looking in the prolific lands of Columbus for that wealth and title of which they had been deprived by the ancient hereditary custom of the entail. In the great majority these empire builders were men of arms, because that was the principal career open to them in those days when commerce and

agriculture, the professions even, save that of the church, were held to be plebeian occupations.

Occurring, as it did, shortly after the expulsion of the Moors from Spain, the discovery of vast, virgin America afforded them an opportunity for great achievements and unlimited fortune. Worthy representatives of that chivalrous company are Pizarro, Cortés Ponce de León and numerous others—men who with the tip of their swords carved their names in the hearts of the countries which they founded. Adventurers, if you will, but men whose adventures formed the basis of lasting nations.

**Today's Dilemma:** The two Americas, the sister continents of the Western Hemisphere, face a well defined dilemma today-strife or peace; on the one hand the intimate understanding of two peoples so different in origin, language and customs, on the other hand, an everlasting struggle for the dominion of one over the other. America, composed of republics where "the will of the people is the supreme law," will profit through the unfortunate experience of Asia and Europe, and once more will make for the standard stated in the constitutions of their republics—that all men are born with equal rights to work out their own happiness and each nationality its own determination within the just consideration of the rights of others.

Measures Taken: The best minds of each group have already taken that step, as proved by numerous conferences for a better Pan-American mutual understanding, where, amidst the most pure atmosphere of fraternity, each group studies and discusses diverse opinions. The work of the Pan American Union skillfully supported by philanthropists, professional men, business men and many others, has already yielded mature fruit. But all these efforts, though the product of the best intentions, have not been sufficient to extinguish to its very root the prejudice which unconsciously and unfortunately has developed between these two great and equally fortunate peoples. Prejudice seems but to increase, and if quick check is not put to it, it may even

make void the generous work of the men of good will.

"Let There Be Light": This is why the leaders of both social groups, those men who with their ear to the ground have heard ominous rumblings, unanimously point to educational centers, and plan for the establishment of a university where those of both continents may meet in an intimate touch of equal rights and opportunities.

Experience shows that most men educated in universities are entrusted with positions of greatest responsibility in their communities; and more, it proves that the ties of friendship formed in school and university are not only of longer life, but are the ones of greatest pleasure and intimacy, they being founded on natural sincerity and mutual understanding, the gifts of youth.

The International University: An international university with a faculty formed of men of the highest, most modern mental training and sterling character of both Americas, one with a wide program in Spanish and English for scientific, literary and professional study, with courses as complete and ample as the very best; a university to draw to her a great throng of students from the whole western hemisphere. Such an institution would naturally be one of the strongest forces toward the welding of both Americas.

The commercial relations between nations are mainly based on the friendly political relations of their governments and friendship among the people. The international university promoting real friendship among the men who would be leaders of public opinion in their countries, would undoubtedly be the most sure and efficient means of facilitating the exchange of interests, of good feeling and of education between the two Americas, thus obtaining as near as possible the greatest unity of action and of thought as regards the solution of world problems.

Its Natural Theatre: Such an international university as this depends largely for the great work it is destined to accomplish upon its location, which is why it finds its natural theatre in the center point of both American

continents—Porto Rico, that island which, by its geographical location, seems planned for such an institution.

Populated by the same type of men who conquered and peopled Latin America, in this island which for nearly a quarter century has been under the favorable influence of the community founded by the Puritans, the student from the South as well as the student from the North would not feel homesick, because just as the first meets a people who are the same as his own, who speak his language, have the same customs and above all are like himself, amiable and hospitable, the latter finds not alone his language, his spirit of progress and many of his customs, but also a large number of his countrymen, comfortably

established under the folds of the stars and stripes.

Besides her favored position between the two great Columbian continents, her ideal climate, excellent health conditions, and her natural salubrity, Porto Rico counts for the better success of such an educational work, on her appropriate environment and adequate material — a bilingual and intelligent population

All these justify Porto Rico's aspirations to be the intellectual beacon in mid-Atlantic to light the moral route of the interchange of ideals, good feeling and lasting happiness between her kin people of blood in the South and her co-citizens of the stars and stripes in the North.

### Athletics in Porto Rico

By George V. Keelan,

General Superintendent of Physical Culture, Public Schools of Porto Rico.

The soldiers of the American Army of Occupation bringing with them a love of athletics and games, started baseball, while the Porto Ricans watched, first with interest, then with envy. The American Government employees played games in their leisure moments and Porto Rican boys, back from schools in the States, played and encouraged their friends to take part.

"The National Game" a Favorite Sport. From that time baseball has always been and always will be the favorite sport of the Porto Ricans. They like to play and to watch the game, and have learned to appreciate its fine points. Early teams were called the Interior, Red D., Pabst, Atenas of Ponce, Army, Interboro, Savarona of Caguas and Plata of Cayey. Later came Ponce (composed of school boys, but the strongest team on the Island), Mayaguez, San Juan, Pope Hartford, Trolley, Colectiva, All San Juan, Boringuen Stars and Fiske. At present the following towns have professional nines: "All San Juan, Puerta de Tierra and Sports of San Juan, Ponce, Mayaguez, Humacao and Yauco.

First Professional Nines to Arrive: The first professional team to visit Porto Rico was Dave Driscoll's All American in 1914, composed of Cadore, O'Rourke, Breen, Zimmerman and other International League players. They had an easy time with the native players, losing only one game, that to Ponce. However, when they returned in 1915 they found that the Porto Rican nines had considerably improved. Ponce beat them several times, and the other teams played well against them.

The Banner Year for the Game. For base-ball, 1917 was a banner year. Four visiting teams, all first class aggregations arrived and the fans were wild with enthusiasm. First came the Pompez' Cubans, with Guerra, Portuondo, Baro, Fernández and Rojo; then the Royal Giants, with "Cannon Ball" Redding, Harvey, Santop and Williams; followed by the Cuban Stars, with Luque, Méndez and Torriente; and the Havana Reds, with Acosta, Rodríguez and the González brothers. These teams were too strong for the Porto Ricans, but they had some wonderful games among themselves.

The American Army Officers' Nine and the Visitors of 1922. During the war, the Army had an excellent team, many of the star players being officers. In 1922, three teams invaded Porto Rico, the U. S. Marines, the Boston Stars and the Santo Domingo Stars, captained by Caratini, a Porto Rican player. The latter team was successful in a majority of its games, but the Marines and Boston Stars were beaten by the local players.

Today's Champions. The best team in Porto Rico at present is the Sports, composed of former Ponce and San Juan Stars, and good enough to play against the best semi-professional teams in the States.

Favorite Players of the Past and Present. Among the best of the native players, past and present, are: Soto, Sotito, Mutis, Trompito, Cesani, Yayo, Juey, Marrero, Quevedo, Thompson and Guzmán of San Juan; Paco Díaz, Henry, Igaravídez, Campos, Mesorana and Torres (Gacho) of the Army; and Caratini, Beitía, L. Rodríguez, the Farbellés, the Pous, the Roques, Olmo, Horton, Octavio Rodríguez, Montaner and Isidoro García, Caco, Anselmo and Guilfuchi of Mayaguez; Jáyase and Santana of Humacao.

Wonderful Development of School Nines. School baseball has developed wonderfully in Porto Rico. The University has a team and the thirteen High Schools of the island are represented on the diamond. Ponce High has an excellent team, as always, and Central High has won nearly all of its games. The smaller schools play among themselves, and most of the famous players of the island have been developed in the schools.

Two Factors that Have Hindered Much Greater Development. Baseball has been hindered from further development by two things, the lack of good ball fields, and the prevalence of gambling at the games. There is only one first class baseball field, that of Ponce, and even that has been shamelessly neglected. If the island had two or three first-class ball grounds no doubt but it could persuade a big league team from the States to come here for the spring training, which would be a wonderful thing for the island. Porto Rico should also organize at least one league with



ESTRELLAS DEL "TEAM PONCE".

AMONG THE FAVORITE BASEBALL PLAYERS OF THE PRESENT.

regularly scheduled games and a season of eight months' duration.

Track and Field Games and Sports. Track and field sports were started in the island's public schools. The first big island meet was held in 1906 and except during the war, there has been one school meet yearly ever since. Among the High Schools, Ponce has won six times, and Central High and the University each five times. In the Grammar School Class, San Juan has won six times. Ponce four times, and Río Piedras once. The records compare favorably with school records in the States.

Athletics have always been fostered in the Army, where meets are held at frequent intervals and excellent athletes have been developed.

Professional Meets and Favorite Athletes. Professional races have been tried, but have not been successful financially. For a time there was a craze for long-distance running, but it died out. The most prominent marathon runners were Olmo, Herminio Acevedo and Boscana. The best sprinters were the Farbellés, J. Vázquez, Torres, Horton and Suárez. The best hurdlers were Soliveras and J. Benítez. The best middle distance runners



CAMPO PARA JUGAR GOLFO, RÍO PIEDRAS. - A SIGHT TO GLADDEN A GOLFER'S EYES.

Mayoral. The best pole vaulters were William Guzmán and Beitía. The best jumpers were Aponte, Guzmán, Farbellé, Beitía and Caratini.

There is only one running track on the island and most of the meets are held at the horse racing parks. At present the small towns have a meet of their own, while the larger towns fight it out for the island championship.

Basketball, Football, Tennis and Golf. Basket ball was started by the Y. M. C. A. and most of the best teams have been developed there. In many small towns there are both boys' and girls' teams. The university has always been prominent in basketball. towns which have shown most interest in this game are Arecibo, Bayamón, Guayama and San Juan.

American football is played by the Army and Navy, but the climate is too warm for this game to be popular on the island.

Association football is played by Spaniards living in Porto Rico. Prominent teams are the España and San Juan, Ponce Sporting Club and Guayama.

Tennis is played mostly by North Americans

were Beitia, Figueroa, Delgado, Meléndez and although in Ponce there are some excellent Porto Rican players, and the University is also taking up the game. The best players belong to the Country Club and the Anglo American Club. A series of matches for the island championship is being held at the time this is written.

> Golf was started recently, and is gaining in popularity.

Play Grounds for the Children and Athletic Fields Both Needed. Athletics have done much for the youth of Porto Rico, and are destined to do more. But first, however, suitable places for the children to play must be provided. The Island needs not only athletic fields for organized sports, but, especially, playgrounds for the smaller children in the big cities. Porto Rico wants to teach her children to play, to enjoy themselves in a healthy natural way, to learn the true meaning of the word sportsmanship. She wants them to grow into healthy, hearty men and women, with strong, active bodies as well as active minds, with the will and ability to win in the great game of life, but to win fairly, and to reserve a word of help and cheer for the vanquished, all of which athletic activities accomplish.

The Anaemic and Hungry Child Unable to Concentrate. The condition in which many of the Island's agricultural and industrial laborers live is one of the most difficult problems of social and economic character and in education as well. Children who attend school without a nutritious breakfast, or perhaps with no breakfast, and without being provided with proper nourishment for the middle of the day, can neither concentrate on study, nor reap the benefit of the school.

An empty stomach and an anaemic constitution are no foundation for a healthy developed brain. No matter how efficient the teacher's efforts may be in method, no matter how great the effort he expends, nor how great his knowledge, he talks to unresponsive children if they are tired and hungry. Empty stomachs and unhealthy bodies but add to the effort of the teacher, and detract from the results that should come from the people's money that is expended in affording education—hunger and knowledge are antagonists.

Knowing the difficulties to be overcome and the condition of the parents of a great portion of the children enrolled in the island's public schools, it would seem as if the Legislature should take steps to see that the money invested in Porto Rico's schools should be sure to produce the greatest possible returns, and with such aim in view make appropriations so as to provide for the maintenance of school lunch rooms where they are most needed, and adopt rules and by-laws governing them.

School Lunch Rooms a Factor in Building Better Citizens for the Future. Such a step would be of immense value to the morality and development of the citizen of the future. An investment which is at present necessary to bring the Porto Rican child as a whole to the proper fulfillment of his duties when he reaches his full age of citizenship, and production for others as well as himself.

As yet the Legislature has not taken this step due to lack of sufficient funds to enable such lunch rooms to function under the control of 'the government, but it is just to say that body does appropriate and cooperate to the greatest possible extent in its power to the aims of public school lunch rooms.



ESCUELA GRADUADA, PONCE.-A SCHOOL IN KEEPING WITH PONCE'S PROGRESSIVE SPIRIT.

The "Centavo Escolar" and Its Work. The "Centavo Escolar" as an association came from the praiseworthy initiative of the Hon. José Gómez Brioso, ex-commissioner of Municipal Education at San Juan, and was one of the similar organizations which offered its aid in founding and operating school lunch rooms, and the lodge "'Regeneración,' de la Soberana de Puerto Rico" induced all the other lodges of the district to cooperate in that noble work.

The Far Reaching Effects of the Work of the Association. The Parents' Association holds meetings to which parents who are not members are invited, and at which the most earnest workers of the body give talks on the aims and work of the organization, and also, make home visits for the same purpose. Thus, they are enabled to convince parents of their obligations to their children, and to encourage and stimulate them to make all possible efforts, even sacrifices if necessary, to enable their children to escape the far reaching tentacles of ignorance. Thus this Association constitutes an active factor to help the work of other kindred organizations such as the "Comedor Escolar," the "Zapato de los Niños Pobres, and others the object of which are altruistic.

Widely Extended Future Growth. The Association collectively and its individual members realize fully that there are some indifferent and careless people who perhaps are unworthy to figure among those who bear the honored titled of parent, and thus fail in their duty to both their children and their fellowcitizens by not endeavoring to enable their children through proper guidance to become both the pride of their homes and of Porto Rico. But this does not prevent the association from struggling to do all it can to extend its growth and to work faithfully towards the establishment of its branches in every school, both those in San Juan, its suburbs and thruout the entire island, and thus to promote the greatest good for all and to guide every one to love progress and justice, progress for them that alone can be attained through education, and justice to their children by doing all in their power to enable them to secure the knowledge which comes only from education.

What the Association Is. The Parents' Association constitutes the most beloved link between the home and the school.

The most practical way in which parents can cooperate with the teachers to enable them to secure those results in effective citizen building which the public school was created to accomplish.

The logical way by which parents can aid the great works inaugurated for their children's good—the maintenance of school lunch rooms, the supplying of shoes to such children as may be unable otherwise to be supplied with them, and the furthering of other measures to promote the welfare and development of children.

The Parents' Aid is Necessary. The parent must cooperate with the teacher, working hand in hand for their children's good, and to defend the rights of the school and of the children. And here it is just to state that the Municipal Department of Education of San Juan under the direction of its Commissioner the Hon. José González Ginorio, sets an example that all parents should follow, by being one of the institutions that cooperate with the Association enthusiastically in the work of the Parents' Association and its dependent institutions such as school lunch rooms for example.

Such is the Parents' Association and such in brief are its aims, and the author welcomes this opportunity to define them to the large audience this book affords, and trusts that this article may aid in arousing still further cooperation in the work and desired results of the Association of Parents and Public School Teachers, that organization which enables the parent and the teacher to work in perfect union toward the building of worthy useful, comfortable citizens for the Island of Porto Rico, and thus assure to so large an extent its greater future.

\*Editor's Note: As there has never been any census taken, or for that matter, any accurate estimate made of the children between five and eighteen who have attended school during some period of their life, and as the rural population of children, which comprises nearly 70 per cent of the total school enrollment, is seldom admitted to school before the eighth year, and further because most of the rural schools provide only four years of instruction, and hence a large majority of the rural children never attend school between the ages of fourteen and eighteen, this figure is rather misleading. (See page 445.)

### Public Libraries of Porto Rico

By Luis O'Neill de Milan, A. B.,

Director of the Carnegie Library at San Juan. Poet. Member of several professional and literary associations.

Although the library movement, so far as relates to the details of its most modern aspect, may be considered as reduced in Porto Rico to the Carnegie Library, the idea of public libraries and enthusiasm therefor are not new in the island.

In the first quarter of the XIXth century there already existed in San Juan the library of the Dominican Convent. The Economic Society of Friends of the Country possessed a select library some of the volumes of which are now in the Porto Rican Atheneum and others in the Carnegie Library. Alejandro Tapia y Rivera and other men of his day, lovers of study, founded the "Reading Cabinet" in Ponce in 1870. The Bar Association, the Supreme Court and the Bishopric always had good special libraries. The same is true of the present Supreme Court and of the Porto Rican Atheneum.

The first municipal library in the island was founded at Mayagüez in 1873. On March 15, 1874, it opened its doors to the public, the first librarian being Don Francisco del Castillo.

The Municipal Library of San Juan was inaugurated October 16, 1880, Don Ramón Santaella, as first librarian, of whom Fernández Juncos says: "This gentleman took up the task of collecting books with such enthusiasm that he gave no peace to the inhabitants of San Juan and nearby towns until they voluntarily took up the bibliographic service. Funny anecdotes in regard to the diligent work of librarian Santaella, are still remembered".

The Municipal Library of Ponce was founded in 1890 with the books of the aforesaid "Reading Cabinet," the private collection of Don Miguel Rosich, and other purchased or donated volumes. (See the brilliant lecture by Don Emilio del Toro, entitled "Influence of Modern Public Libraries on the Family and on Social Culture," delivered at the Carnegie Library of Porto Rico, April 6, 1913, and the splendid work by Manuel Fernández Juncos,

entitled "Public Libraries of Porto Rico," both published in the volume of "Sunday Lectures at the Insular Library," for the year 1913, pages 50-57 and 128-135, respectively.)

Insular Library. But the most important effort made in this island and the one having the most important consequences, commenced with the Insular Library established under that name in 1903. It was installed in quarters in the old Provincial Deputation Building, the one where the Department of Agriculture and Labor and the Museum of Porto Rico are at present located.

Under the wise direction of the distinguished master of Porto Rican letters, Dr. Manuel Fernández Juncos, efficiently aided by a young North American, Sloan D. Watkins, by name, who was quite competent in library matters. and encouraged in his efforts by the support and enthusiasm of a noble American, Mr. James L. Dunlevy, whose activities in Porto Rico are not as well known as they should be because of their evangelic silence, but which were of positive value to the island, and who died in Santurce on October 2, 1915, the Insular Library made in its progress a true change of front and was converted into a modern institution whose activities were such as pertain to institutions of that class, throughout the world.

All the books were either classified or the classification revised, for the former librarian, Mr. Louis Weisberg, or his predecessor, Mr. R. A. Van Middledyck, or both of them (the latter being the author of a history of Porto Rico) had made a classification and catalogue which, if not wholly utilized was without doubt an effort worthy of mention. The fact must be stated that the books were already in free circulation.

The books were classified and reclassified, or the classification revised according to the Dewey system (the one most in vogue in America and a system which is being rapidly

introduced into Europe) and were catalogued according to the Cutter system of a dictionary catalogue prepared on cards the greater part of which were furnished by the Congressional Library at Washington, D. C. These cards were prepared for books in English and their general plan was followed by the cataloguer of the Insular Library in preparing them for books in Spanish.

Somewhat later the use of Accession Books was introduced, which according to Dewey "is the first record to be filled and by no means least in importance."

The Carnegie Library. And next came the endeavors of Mr. Dunlevy, Agustín Navarrete (then trustees of the Insular Library), and Manuel Fernández Juncos, who sought the personal influence of ex-Governor Arthur Yager for the purpose of getting a Carnegie Library for Porto Rico.

These efforts, and those previously made by Dr. Francisco del Valle Atiles and other Porto Ricans of prestige, were crowned by success thanks to the joint action of Governor Yager,

the personal friend of Mr. Carnegie, and of our Legislative Assembly, then presided over by Messrs. José de Diego and Luis Sánchez Morales, who formed part of the library committee who negotiated the matter of the new building the construction of which was entrusted to the notable Porto Rican engineer, Mr. Ramón Carbia. The building is of good architectural taste and stands on a lot measuring 6,000 square meters, ceded by The People of Porto Rico. It is a building of two stories and cellar, and has nine rooms besides the office space. Of these rooms, three have been temporarily granted to the American Red Cross, Porto Rico Chapter, and one to College of Law of the University of Porto Rico.

The administrative personnel is composed of ten employes, including the Librarian. At present it has nearly 30,000 volumes, and is used widely by both Spanish and English speaking people, the average number of visitors being about 200 daily.

It is well known that Mr. Carnegie, and later on the Carnegie Corporation of New



NIÑOS DE LAS ESCUELAS DE SAN JUAN EN LA BIBLIOTECA CARNEGIE. STORY HOUR FOR THE CHILDREN AT THE PUBLIC LIBRARY.

York, requires municipalities benefitted by his donations of libraries to appropriate 10% a year of the sum received by them, as a contribution towards the support of such libraries. The Legislative Assembly made formal promise of such contribution, for which it pledged the good faith of The People of Porto Rico, and thus did the island get a Carnegie Library to which the former Insular Library was transferred in July, 1916. The official inauguration of the Carnegie Library taking place on July 27, 1916.

From that time on the Library has taken up new activities. Story telling classes have been established for children and a system of traveling libraries and postal book service has been inaugurated, whereby books are sent to all parts of the island, upon payment of postage in the latter case, by the applicants. In this way has the Library over 5,000 books in circulation outside of San Juan.

Plan under Study. To make the cooperation of the public library more effective as regards the culture of the island, the Board of Trustees of the Carnegie Library has under study the problem of associating the municipal libraries of the different towns of the island with the Carnegie Library as branches of the latter.

A Well Chosen Site. The location of the Carnegie Library was happily chosen, for not alone does it occupy a conveniently accessible site, but a most appropriate one. To its rear on higher ground stands picturesque San Cristóbal, that ancient fortress which typifies those days of old when physical strength was the main factor of a people's progress. And how appropriate the placing of San Juan's Carnegie Library in front of that ancient stronghold as if to signify to all that knowledge should be backed by physical strength to make the ideal man.

Other Libraries. Next to the Carnegie Library in importance there are the municipal libraries of San Juan, Ponce, Mayagüez, Yauco (possessing its own building especially constructed), and others of minor rank. Public reading roms, also exist in different towns of the island, supported out of municipal funds.

There are, besides, in Guayama and Fajardo, libraries called municipal school libraries because their collections or service, or both, partake more of the nature of a school library, although they are supported out of municipal funds, no legislation having been enacted levying a municipal school tax, wherefore we may technically consider them as municipal libraries.

Although these educational centers do not seem to be initiated in true modern library systems, as yet, an active and optimistic spirit is noticeable on the part of those entrusted with their management.

The Function of the Public Library. It is well known that not all persons are privileged to acquire higher education, and even the number of those obtaining secondary mental training is limited. Hence the most important function of public libraries.

Dr. Melvil Dewey, ex-Director of the New York State Library, and Library school, says: "We have come to understand that we must begin with the kindergarten and end in our libraries".

"The social benefit of a library is universal", says the distinguished Rector of the La Plata University, Dr. Joaquín V. González. Carlyle affirms that the true university resides in a collection of books. And Joaquín Costa, the eminent Spanish writer of the XIXth century, so expresses himself: "The Constitution says: 'Every Spaniard is obliged to defend his country by force of arms;' but I say: 'By force of books.'"

Every city of any importance, in Europe as well as America, pays marked attention to these valuable centers of public culture.

Public libraries are no longer places reserved for higher spirits, for the exquisite group of aristocrats of thought, for the lovers of mental labor. The present day library is not a book storehouse. It is an active force, and it must be acknowledged to be a powerful factor in the organization and progress of modern society.

Hugo Munsterberg, the German sage and professor of psychology at Harvard University, says: "But the American taxpayer sup-



RESIDENCIA DEL LCDO. C. COLL Y CUCHÍ, DONDE EL CULTO A LA FAMILIA Y A LOS LIBROS ES CASI UNA RELIGIÓN.

ports this (the public library) more gladly than any other burden, knowing that the public library is the best weapon against alcoholism and crime, against corruption and discontent".

What Carnegie said. Let us listen to Carnegie, the generous donor of the library in Porto Rico that bears his name. "Great Britain has been foremost in appreciating the value of free libraries for its people. Parliament passed an act permitting towns and cities to establish and maintain these as municipal institutions, and whenever the people of any town or city voted to accept the provisions of the act, the authorities were authorized to tax the community... Most of the towns already have free libraries under this act".

And to end these quotations, let us remember a remark of former President Cleveland: "And yet if we are to create a good citizenship which is the object of popular education, and if we are to insure to the country the full

benefit of public instruction, we can by no means consider the work as completely done in the school-room. . . These considerations and the fact that many among us having the ability and the inclination to read, are unable to furnish themselves with profitable and wholesome books, amply justify the beneficent mission of our Free Circulating Library".

And to close, the writer would say that the complicated life, the strenuous life, as Roosevelt called it, brings us each day closer to the library where we find valuable aid in this era of specialties.

To earn one's daily bread on an elevated level of life or even on a medium standard, elementary education is no longer sufficient. But besides this there is something else. "Not on bread alone doth man live," said the Great Master. And what is the public library, but a prolific fount of spiritual life? "The Way to Success," the writer would place over the entrance of every library.