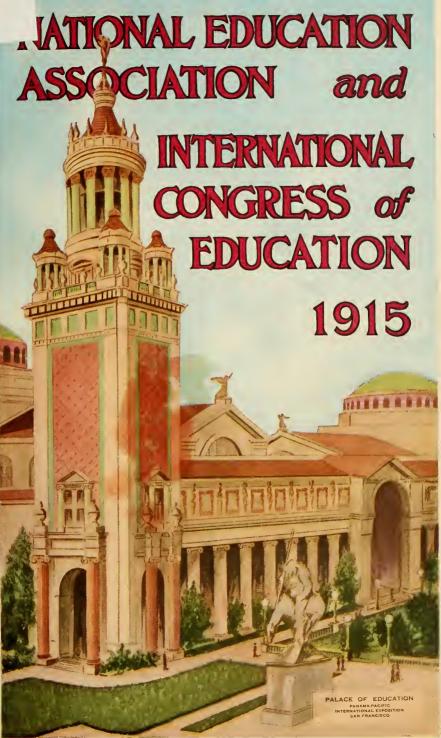
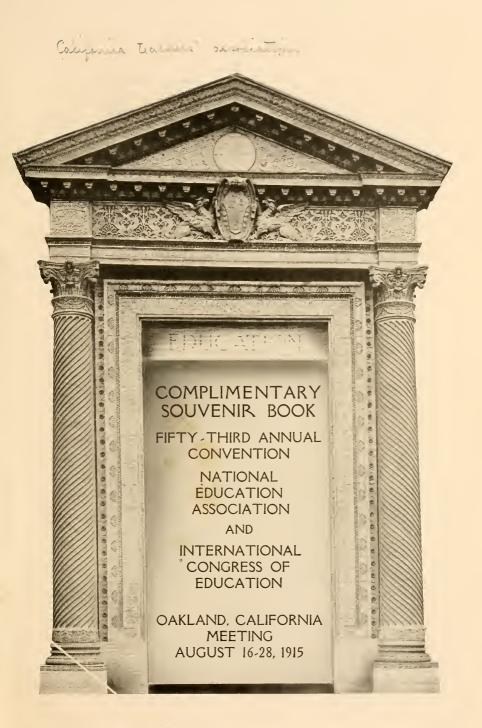
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Map of the Bay Region, Showing San Francisco, Oakland and Surroundings



Minor Portal, Palace of Education, Panama-Pacific International Exposition.



By iransfer OCT 11 1916

PRESENTED TO

THE VISITING TEACHERS

BY

THE CALIFORNIA TEACHERS' ASSOCIATION

AND THE

DIRECTOR FOR CALIFORNIA

OF THE

NATIONAL EDUCATION ASSOCIATION

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FOREWORD

HE meeting of the National Education Association at Oakland, August 16-28, 1915, marks the fifty-third annual session of that body. On four previous occasions the organization has met in our state: in 1888 at San

Francisco; 1899 at Los Angeles; 1907 at Los Angeles, and 1911 at San Francisco. On each of these occasions the attendance was greater than at any previous meeting of the association.

The value of an educational meeting, however, is not measured in terms of numbers attending. The quality of these meetings and the results growing out of those sessions held in California has had a marked effect upon the schools of our state. This year California called to the educators of the Nation to come again to the Pacific Coast, not from any selfish motive, but because we were holding here a great International Exposition. This Exposition is in itself a world training school, and teachers from every corner of the country should have an opportunity to profit by it.

The California Teachers' Association welcomes the teachers of the Nation. It welcomes the members of the International Congress of Education, and our distinguished guests from foreign nations. We in California feel certain that this third International Congress, this fifty-third session of the National Education Association and this greatest of all International Expositions will leave an impress for good upon the teachers and the schools of California.

We beg the members of the N. E. A. to accept this booklet in token of our appreciation of their visit among us.

The thanks of the State Director are due those who graciously contributed to these pages, and to all who in any way made the issuance of the publication possible.

ARTHUR HENRY CHAMBERLAIN.

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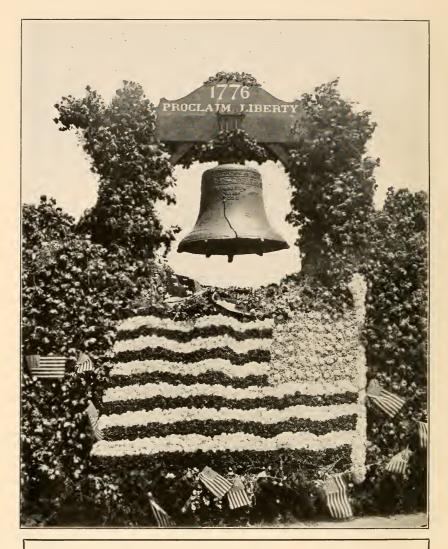
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THE LIBERTY BELL

Since its first important ringing in 1753, in protest against the issuance by Great Britain of Provincial Money, the Liberty Bell has been the symbol of Democracy, Good Citizenship and Freedom under law. Its second ringing, July 8, 1776, announced the Proclamation of the Declaration of Independence. Cast in London in 1752, it was again cast in Philadelphia the following year. The crack appeared July 8, 1853, when tolling to announce the removal of the body of United States Chief Justice Marshall from Philadelphia.

The bell was honored everywhere on its recent trip to the Exposition. It now hangs in the Pennsylvania Building on the Exposition Grounds. It is made of bronze, is three feet in height, weighs 2,080 pounds, and cost \$300.00.

WELCOME TO CALIFORNIA

By David Starr Jordan President of the N. E. A.



T HIS is a word of welcome to the teachers of the United States, from the teachers of California.

We love California because California first loved us. If you stay in California long enough you will understand what that means. It means that in California every day is a day of joy of one kind or another. California is to the rest of the United States what June is to the rest of the year. It is the spring-time of our republic. It stands for enjoyment of life and of all life signifies.

The three attributes of California are its climate, its scenery, its elbow-room.

As to the climate, California has but two seasons,—Spring and Fall. Spring from October to June, Autumn the rest of the year. "Half a year of clouds and flowers, half a year of dust and sky." In your stay in California, you will see only the azure half, for spring-time has drawn back into the mountains. But with your clarified imaginations you shall fancy the rest. You may see in your mind's eye the autumn rains which "dash the whole long slope with color" and start up again the optimism of the Spring.

In California the climate is never our enemy. We do not have to shut it out with double walls, nor scorch it or stew it with the remorseless base-burner of the suffering East. The house is used to keep our books in. If it grows cold in the winter, go out of doors to keep warm. That is the California way and one soon gets used to it. "A monotonous climate" some have called it, but it is "like the monotony of good health." Just as there is not a single commonplace day in the full rounded California year, so there is not a monotonous mile in the long range of her plains and seas and mountains. The high Sierras do not shrink from comparison with the Alps. The highest point. Mt. Whitney, is only 200 feet lower than Mont Blanc, and there are forty peaks as high as the Jungfrau. They have no hotels—only a blanket under the stars, but that, with a burro, is all you need. They have more color than the Alps, giant trees, swift waterfalls, and though less picturesque in a white and green way, they are far more friendly. There is one side open to the climber—the west—while the east side of every mountains riots in unfathomable precipices.

Then California is still the land of elbow-room. Her two great cities are a bit crowded, for they hold the melting-pots. But outside, the men grow like the oak trees, each as it may and with wide-spreading branches.

They say that Californians are hospitable. They are more than that and more than tolerant. They enjoy life in the full, and that demands giving enjoyment to others. They give and take, never concealing their opinions and never asking or expecting concealment from others. That is the highest tact—to rise about all need of it.

Finally, as teachers, you will be most interested in our schools. You will find that the pressure of higher education is greater in California than anywhere else in the world. And the pressure for knowledge is felt all along the line. The rural school is seen at its best in California, for this out-door land is very kind to children. And from the rural school grows the County High School, which has possibilities in a land of sunshine which dwellers in realms of mud, frost and blizzard can hardly understand. Then there are our City High Schools, our professional schools, and all the rest which cannot go into this enumeration.

And as our Spanish predecessors said: "These are all yours," our house is yours, our horses, our automobiles, our service, our hearts. It is yours, for the time at least to own California. And may you learn to love her as she has first loved us!

Executive Department State of California

California offers her most cordial greetings to the National Education Association. We feel that it is a singular honor to have assembled within our State a body which has become so vital a factor in the progress of our country. It is our earnest hope that those attending the convention will find their visit to California profitable and enjoyable.

Aram W. Johnson

Governor.



PANAMA-PACIFIC INTERNATIONAL EXPOSITION— THE UNIVERSITY OF THE WORLD

Charles C. Moore, President



O the delegates of the fifty-third annual convention of the National Education Association and their friends, the management of the Panama-Pacific International Exposition extends a most cordial welcome.

You have come to the University of the World. Here, for your delectation and instruction, the great nations have contributed the sum of their achievements in the arts and industries — the world's best efforts in recent years.

There is no association with whose purpose a world's exposition holds more in common

than that great organization which centralizes the educational impulses of the country, the National Education Association. The purpose of a universal exposition is to bring into the homes of the people and into the lives of those who seek knowledge a deeper appreciation of the world's achievements in art and architecture, in industry, in sociology, in methods and principles of education; to present, indeed, a cross-section of human achievement. A visit to a world's exposition which represents the constructive elements of civilization, is an education not only of the intellect, but of the heart and of the humanities.

In extending a cordial welcome to you, our honored guests, delegates of the National Education Association, and the assurance of their deep and lasting appreciation of your presence in California, coming as you have through the wonderland of western America, my fellow directors of the Panama-Pacific International Exposition join with me in expressing the hope that upon your return to your homes, you will advise your friends of what you have seen, that they too may enjoy this Exposition, the worthy contribution of many states and nations.

MESSAGES FROM PAST PRESIDENTS

At a late hour, the Past Presidents of the Association were asked to send statements or greetings to the teachers of the Nation. Eighteen of our Past Presidents are now living. Contributions from several of these arrived too late to be included.

Of those whose messages appear today, Aaron Gove was President of the first California meeting at San Francisco in 1888; Charles R. Skinner presided at the Milwaukee meeting in 1897; O. T. Corson at Charleston in 1900; William H. Maxwell at Ashbury Park and Ocean Grove, 1905; Nathan C. Schaeffer at Los Angeles in 1907; Carroll G. Pearse, Chicago, 1912; Joseph Swain, St. Paul, 1914.

Of the other living Presidents, there are: Thomas W. Bickncll, Madison, 1884; Nicholas Murray Butler, Denver, 1895; Newton C. Dougherty, Buffalo, 1896; James M. Green, Detroit, 1901; Charles W. Eliot, Boston, 1903; John W. Cook, St. Louis, 1904; Edwin G. Cooley, Cleveland, 1908; Lorenzo D. Harvey, Denver, 1909; James Y. Jöyner, Boston, 1910; Ella Flagg Young, San Francisco, 1911; Edward T. Fairchild, Salt Lake City, 1913.

A more illustrious group of men and women are to be found nowhere in the United States or in the world. It is such men and women and a teaching body from which others of like merit may be chosen, that has made the N. E. A. the most important educational body in the world.—Editor.

Arthur H. Chamberlain, Director N. E. A.: Dear Sir— The first Coast meeting in 1888 was one of the great ones. A membership of 7,213 was present. San Francisco en masse received and greeted and entertained its guests as only that hospitable city has the head, heart and ability to accomplish. The names of many active participants in that meeting now of fraternal and precious memories eminent in the history of the construction of our country's educational foundations are no longer on our roll.

Swett, Hoitt, Campbell, Anderson, Denman, O'Connor, Harris, Sheldon, Marble, Canfield, Hewett, Stevenson, Greenwood, Soldan, Rounds, Pickard, Richards, Sprague, Woodward, Peabody, Hancock and others are gone, but their spirits remain, adding wisdom and power to our councils, in which must be initiated plans for the further advancement of educational methods and practices. AARON GOVE.

Albany, N. Y., July 28, 1915.

Arthur H. Chamberlain, San Francisco, Cal.:

To thorough grounding in the three r's, add Spelling, Grammar, History, Geography, Intelligent Citizenship. The object is public education. We must remove inflexible rules governing examinations, and make them attractive and practical, not nightmares. The man or woman possessing the true spirit of the teacher, a love for children, and patience and sympathy, should be drawn into the profession. Children should be protected, not driven away by technical regulations. Educational leaders have great opportunity for desirable reform.

CHARLES SKINNER.

Dear Mr. Chamberlain:

All who have ever experienced the joy of a California welcome and enjoyed the rare treat of California's hospitality long to repeat such experience and enjoyment. Thousands of teachers, therefore, are looking forward to the coming meeting of the National Education Association in Oakland with delightful anticipations of the pleasure and profit which they know, by experience, is in store for them.

Thousands of teachers who have not yet seen California, but who have heard much of the beauty of its scenery, the comforts of its climate and the generosity of its people, are looking forward to a realization of their hopes some time to visit the Land of Flowers and Sunshine, and enlarge their vision of life, by means of a journey to the Pacific Coast.

A trip to California is always a delightful experience, and under ordinary circumstances makes a large contribution to the education of anyone. This year, however, it will mean more than ever before, because such a trip makes possible attendance upon the sessions of the greatest Educational Convention ever held, and also a visit to the greatest Exposition in our history.

It is a matter of congratulation, therefore, that the teachers of America are privileged to meet once more in the State of California under such favorable conditions, and attend a great International Education Association.

Very sincerely yours,O. T. CORSON.

Dear Mr. Chamberlain:

Your letter of July 16th asking for a letter to the N. E. A. has been forwarded to me here, where I am trying to pick up a little health and strength after the first serious illness of my life. The nervous breakdown which I have suffered has for the moment greatly reduced my energy. You will, therefore, I am sure, excuse me if I content myself with wishing the members of the N. E. A. the most successful meeting at Oakland that body has ever held. Most gratefully I remember how you and the other California members helped to make the Ashbury Park meeting, where I had the honor to be President, a success. It is one of the great regrets incident to my illness that I cannot work with you for the success of the Oakland meeting.

> Very truly yours, WM. H. MAXWELL, City Superintendent of New York.

Dear Friend:

For the fifth time the National Education Association will hold its mid-summer meeting on the Pacific Coast. The first of these meetings was held in San Francisco. Nothing was too good for the visiting teachers from the East. Every one returned from that visit with the profound conviction that education had a great future in that Western land of promise. The hopes of those days have been more than realized in the school systems and higher institutions of learning in California, Oregon and Washington.

The second of these meetings was held at Los Angeles. At that meeting the things of the mind and the higher life received special emphasis. The hopes and aspirations of the educators at that meeting have since found expression in the public schools of all sections of the United States.

The third meeting was likewise held at Los Angeles. When the railroads of the East refused to offer satisfactory rates, the railroads and the metropolis of Southern California came to the rescue and gave the N. E. A. the third largest enrollment which the Association had been able to secure up to that date.

At that time the second Peace Conference at The Hague was in session. At Jamestown, on the Atlantic Coast, the greatest naval display the world had ever seen occurred in connection with the Exposition, which in that year was held to commemorate the first settlement of Virginia. The N. E. A. for the first time in its history passed resolutions in favor of the teaching of history from the Peace point of view. The friends of peace fondly hoped that arbitral justice might take the place of war in the settlement of international disputes. The fifth meeting will have to face the failure of these hopes through the most terrible war of modern times. The effort to stampede the public schools into the adoption of military drill will without doubt, be made under the plea of necessary preparation for National defense.

The last California meeting was at San Francisco.

Fortunately, this year's President of the N. E. A. is a California Educator whose voice and pen have ever been against militarism in all its forms. David Starr Jordan, let us fondly hope, will be a powerful advocate of preparation for peace rather than war, as well as of safe and sane methods of National defense. If we must have a citizen army, let us follow the example of the Swiss Republic, which postpones drill with muskets until the youth has attained a physical development beyond the high school period, usually until the age of twenty has been reached. I congratulate the people of the Pacific Coast on their great Exposition and on the prospect of another epochmaking session of the National Education Association.

With best wishes, I am, very sincerely,

NATHAN C. SCHAEFFER,

The National Education Association, now entered upon its second half-century, is serving more completely than at any time in its history the need of all who are engaged in the work of American education. Special organizations for the meeting and interchange of ideas and experiences among those filling particular parts of our educational field are useful and will continue to prosper, but the N. E. A. brings together into a great meeting and sets before a common platform the teachers, their leaders, their employers and their constituents. The educational problems of most concern to the Nation are discussed. The school people get the inspiration which comes from contact with their leaders and with each other. No other educational organization serves or can serve such a vital important purpose. CARROLL GARDNER PEARSE.

Carmel-by-the-Sea, Cal., July 27, 1915.

Arthur H. Chamberlain, Director N. E. A. for California:

Dear Friend-Your letter of July 16th has just reached me after going to Swarthmore, Pa., and back. It is like California to publish a little book for each member of the N. E. A. To me a return to California is a home-coming. Twenty-four years ago I was one of the Pioneer Faculty of Stanford University. For two years I thoroughly enjoyed my work there and became a Californian in spirit and in truth. Nothing would have taken me away except the call of my own State and Alma Mater, for Mrs. Swain and I were supremely happy in this State. While I have several times returned to California, I am especially glad to return in this year of the great Panama Exposition, and when we honor that great American, as well as Californian, David Starr Jordan as President of the N. E. A. All the arrangements for the great series of Educational Congresses under the auspices of the N. E. A. seem to be the best possible, the programs are superior ones, the attendance will undoubtedly be large, and in a word, everything points to a great California meeting in 1915. From past experiences I know that the generous hospitality of California will be at her best, and that all the great gathering of the teachers of the N. E. A. will return to their homes sounding the praises of California, and with new inspiration for their work.

As one of the committee in charge of the Education Congress, I wish to express my great appreciation of the foresight and wisdom of the managers of the Panama Exposition in making education such a prominent feature both in the Exposition itself and in the magnificent series of educational congresses.

To the members of the N. E. A. who have so recently honored me as your President, I wish to congratulate you in the opportunities spread out before you, and as an old Californian bid you cordial welcome. I have the honor to be

Very sincerely yours, JOSEPH SWAIN, President Swarthmore College.

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

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THE NATIONAL EDUCATION ASSOCIATION

By Durand W. Springer, Secretary



THE National Education Association is the largest organization and contains within its membership representatives of all phases of educational activity from the kindergarten to the university—teachers, administrators, school board members, librarians, school patrons and bookmen—in fact all classes of persons who are in any way interested in the various educational problems of the day.

Its annual Volume of Proceedings contains papers and discussions covering a wider range of educational thought than are to be found in any other publication.

Through the reports of its various committees on educational investigations it has exercised a most effective influence in shaping the educational policies of this country.

It holds two meetings a year, and brings to the different sections of the country as speakers on the programs of those meetings larger groups of educational leaders than does any other organization.

It deserves the hearty support of every teacher who believes in the doctrine that teaching is a profession worthy of the best effort of every person rather than a mere occupation, temporary in character and one to be escaped as quickly as possible.

With "Service" as the central thought of the Panama-Pacific International Exposition, it is appropriate that the meeting this year should be held where the members can secure that inspiration in viewing the artistic setting of the Exposition and studying the practical exhibits, which will give them a desire to make the coming years the most serviceable for the boys and girls in their respective schools.

THE NATIONAL EDUCATION ASSOCIATION By Irwin Shepard Former Secretary



N historical retrospect of the growth of the public schools of our country discloses the noblest and most patriotic aims and efforts of its citizens. The early absence of governmental organization, support and control of these schools created a demand and an opportunity for initiative on the part of teachers and citizens in organizing as well as supporting public education. It was early realized that this could be accomplished best, and indeed only, by the voluntary association of the teachers and citizens especially interested. The honor of being the oldest

organization for this purpose belongs to the American Institute of Instruction which was formed in Boston, Mass., in August, 1830, as a New England association. Then followed a period of activity in organizing state teachers' associations, until fourteen such associations had been formed before 1857. Other associations for the same purpose were also formed but did not prove to be permanent.

The need for a teachers' organization of a national character was generally felt. In 1857 a call for such an organization appeared, which call was proposed by T. W. Valentine, President of the State Teachers' Association of New York, and was written and issued by Daniel B. Hagar, President of the Massachusetts State Teachers' Association, after securing the signatures of the presidents of the state teachers' associations of Missouri, New Hampshire, Indiana, Pennsylvania, Vermont, Iowa, Wisconsin and Illinois. In response to this call a meeting was held in Philadelphia, Pa., August 26, 1857; a constitution adopted and the organization of "The National Teachers' Association" perfected, with forty-three members. This association has continued its great work for fifty-eight years. Its name was changed in 1871 to "The National Educational Association," and in 1886 it was incorporated under the laws of the District of Columbia. In 1906 it was reincorporated by special act of Congress as "The National Education Association of the United States."

During the fifty-eight years there have been held fifty-three annual conventions in thirty-two different cities, located in twenty-two different States. This wide distribution of meetings certainly confirms the national purpose and character of the association. The average annual enrollment during the first twenty-seven years, in which twenty-three conventions were held, was but 230; the largest number in any year being 380. In 1884, at the convention held at Madison, Wis., the annual membership rose to 2,729, and has steadily increased from that time. During the seven years from 1884 to 1890, inclusive, the annual membership averaged 4,048. During the next ten years, 1891 to 1900, inclusive, the average was 7,817. From 1901 to 1910, inclusive, the average of 15,132 during the past four years.

For the twenty-three convention years before the Madison meeting in 1884 the revenue from memberships was not sufficient to pay the cost of publishing and distributing the annual volume of proceedings through which it was the declared purpose "to distribute to all the accumulated experiences of all." The loval members of those years accordingly contributed, in addition to their annual membership fees, sufficient to secure the publication of the annual volumes. These volumes, before 1884, are, therefore, testimonials to the generosity and devotion of the limited number of members of those years. With 1884 all debts and deficiencies were paid off and a surplus of \$3,400 set apart as the beginning of a Permanent (invested) Fund, which has grown by accumulations of thirty years to \$190,000. This has been possible because of the continued devotion of the members and the economy of administration. This devotion is illustrated by a fact worthy of note that no member of the association appointed to speak at any convention, even though it might necessitate a journey across the continent, has ever asked or received payment for his services, or even the expenses of travel and subsistence. Hence the Permanent Fund

may appropriately be regarded as a monument to the generosity of the active loyal members who have for so many years freely contributed their services to the annual meetings, which have become the greatest and most valuable educational conventions in the world.

In the year 1892, when the financial integrity of the association had become assured, a new and most important policy was inaugurated by the appointment of a Committee of Investigation, with an appropriation of \$2,500 for its necessary expenses. This committee, which was named "The Committee of Ten on Secondary Education" called to its aid nine other committees of ten each and made an exceedingly valuable report in 1893a report which is still in active demand. Then followed the "Committee of Fifteen on Elementary Education"; the "Committee of Twelve on Rural Schools"; and the "Committee on Salaries, Tenure and Pensions of Teachers," whose great report, compiled with the co-operation of the U. S. Bureau of Labor, was issued in 1895 in a pamphlet of 458 pages. This policy of endowing committees of investigation has gone forward as extensively each year as the available funds would justify. At the present time there are twelve committees of investigation at work under the authority of the General Association and sixteen under the authority of the several departments. These committees, however, have not all received appropriations for expenses. In this way the association has still further, in addition to its extensive and valuable convention proceedings, realized the declared purpose of its organization, as expressed in the language of the original call in 1857, viz: "to promote the educational welfare by concentrating the wisdom and power of numerous minds and by distributing to all the accumulated experiences of all."

It was to this motto and to the spiritual character of the work of the association, that our honored and revered member, Doctor William T. Harris, referred so beautifully in an address in 1891, in which he said: "Spiritual giving is not a giving which diminishes the supply of the giver. He who, in the papers and discussions of this association, has expounded his own experiences and reflections has, in the act, helped himself first of all to see more clearly than before the true lessons of life." I believe it is true, as may be seen from the volumes themselves, that no one of our many devoted members has ever contributed so extensively, and so richly, to the spiritual life of the association as Doctor Harris, himself. And so this great association has been built up by the spiritual, more even than by the material, contributions of its many loyal and devoted members, who have represented every State in our Union, and several foreign countries.

In this connection the generous and valuable services of the Educational Press, numbering 150 or more publications, should be recognized. These journals have, throughout the history of the Association, especially during the years of greatest growth, rendered loyal and effective service in many ways; always without asking or receiving any compensation therefor. This service has been of a value beyond computation and has always merited and received the highest and most grateful appreciation of all officers and members.

One of the most important achievements of the association has been in proposing and securing the creation of the United States Bureau of Education by act of Congress. This Bureau was first proposed at the third convention which was held in Washington, D. C., in 1859. It was further discussed at later conventions and the desired action by the Congress was secured in March, 1867, chiefly through the persistent efforts of leading members of the association, assisted especially by Hon. James A. Garfield, who was at that time a member of the House of Representatives. This Bureau of Education has ever been the chief co-operative organization of the association. This co-operation and generous helpfulness has steadily increased and was never more important and effective than at the present time, especially in all of the arrangements for the approaching International Congress of Education to be held in Oakland in connection with the Panama-Pacific International Exposition. It is worthy of note that an International Congress of Education was held, in connection with the World's Columbian Exposition at Chicago in 1893, under the auspices of a Committee of the Association co-operating with the Bureau of Education. The papers and discussions of that Congress were published by the association as the annual volume for that year and is one of the most valuable of the series. This volume shows that forty-three foreign educators contributed to the proceedings of that Congress representing fifteen foreign countries.

The most important change in the internal organization of

the association occurred in 1895 when the active, permanent, voting membership was created by constitutional amendment. The number of these members has reached something more than seven thousand and is steadily increasing. This membership has given the association a permanency of character and administration which could hardly be secured in the days when the associate members present at any convention were entitled to vote on administrative questions.

The actual growth of the association is best measured by the addition, in 1870, of four subordinate departments, viz.: School Superintendence, Normal Schools, Elementary Education and Higher Education, and the further extension in subsequent years until now there are eighteen such departments working under the general direction and control of the main association and representing every important national educational interest. In addition to these departments, there was created in 1880 "The National Council of Education," composed of a limited number of elected members. The purpose of this Council has been to establish in the association and its departments the highest standards for investigation, discussion, and formulation of educational principles. Its work has been increasingly valuable and helpful.

One of the helpful and inspiring features of the association's history has been the delightful and generous hospitality with which the members were received by the citizens of the various states and cities in which the annual conventions have been held. In this respect no state has ever excelled the State of California. The first time we ever met west of the Missouri River was in San Francisco in 1888. It is impossible in a brief sketch to describe the reception and characteristic welcome with which we were greeted by the citizens of San Francisco and the entire state. It is well illustrated by the fact that there was a registration of 4,278 members from California alone. Our second California convention was held at Los Angeles in 1899, at which meeting the same royal welcome throughout the state was extended, while 4,357 members registered from California. The association later selected California as the appropriate state in which to hold the Fiftieth Anniversary Convention in 1906. All arrangements for that meeting at San Francisco had been completed, when the great fire came to that city and made it impossible to hold a convention that year. The Fiftieth Anniversary

Meeting was adjourned until 1907 and was held in Los Angeles, at which convention 17,324 members were enrolled, including 6,384 members from California alone. In 1911 the association again met in San Francisco with an enrollment of 18,587, of which 6,961 were from California. It is therefore not surprising that the association welcomed the call to hold its fifth California Convention in directive connection with an International Congress of Education in the city of Oakland in 1915.

It is impossible in a brief sketch to describe adequately the extensive and important work for the organization and uplift of national educational interests accomplished by this association through the noble, unselfish, spiritual services of the loyal and devoted members. It is anticipated that new and still more useful era of service will be inaugurated, as its members meet in the great Congress to be held in Oakland, California, near the Golden Gate:

- "Where the autumn and the spring times are by equal glory graced;
 - Where the winters are the summers that Dame Nature has misplaced;
 - Where every moment is a note in an eternal song,
 - That sings adown our poppied fields through all the seasons long;
 - Where roses with the lillies vie through every fragrant day And Heaven seems so very nigh it can't be far away;
 - Where close to man on either hand are mountains or the sea; Well! this is California, and—it's good for you and me."

THE SIGNIFICANCE OF THE PANAMA CANAL

By Benjamin Ide Wheeler President, University of California



y HE Canal is open. It was begun with righteous promptitude, built under suppression of graft and yellow fever, and opened on time and on equal terms to all nations. Had there not been a considerable exercise of the promptitude, particularly in securing right of way, the Canal would not have yet been begun; had it not been for army engineering and army sanitation, no man knows when the work would have been completed; and, had it not been for the repeal of the tolls-exemption act, we should have had various and ever-recurring

reason to wish that we had never tried to build a canal at all.

The Canal and its building are a distinguished credit to our government, and it even looks as if its administration would shortly become such. In fact, it may well be that the building and operation of the Canal will give the world the best concrete assurance on the largest scale yet offered, that democracy is able to avail itself of the best expert service, and set upon itself the restraint necessary to such use. If so, we shall have to reckon this by-product among the chief benefits of the Canal. The whole work bears a good name for its "politics",—or relative lack thereof; and its beginning, its carrying out, and its ending bear witness severally to the firmness and wisdom of three successive administrations, to each of which, as far as the Canal is concerned, the American people, in spite of its wont, can afford to be ungrudgingly thankful.

It is evident that the Canal will have,—must have—with the process of the years, an overwhelming influence in readjusting the conditions of human life upon the globe. There are four connections in which the canal opening will be immediately felt: 1. The eastern and western coasts of the United States will be drawn closer together. They have been wide apart. Their interests are different. They do not understand each other. Closer relations will, however, show how admirably they supplement each other. The West yields the raw materials of industry and foodstuffs. The East is industrial. Interchange with the development of interdependence will make their very differences a source of union.

2. The west coast of North America will be made accessible to the world. All through the ages of man on the globe the Pacific has been a waste and neglected area. In our geographies the world maps always begin and end within it; the Pacific is as good as never in the middle of the map. It is so with the days; they end somewhere in the Pacific, and then begin all over again with new number and dress before they land in Asia.

Everyone who has looked out onto the Pacific from the beaches and bluffs of California must have felt it a lonesome ocean. And California with its vast plains and scant population often seems a lonesome land. Though evidently created for the special use of humans, it has had to wait long for humans to come and find it. It lies far off under the sunset, a blessed island pent up between twelve hundred miles of mountains and desert on the one side and five thousand miles of barren sea on the other.

The narrow Pacific Coast strip of North America which California's position represents has been hitherto about the most isolated part of the usable world. Chile was much more accessible to ships from Europe. Ships which continued their voyage to San Francisco had not only to cover seventy degrees of latitude, but must traverse westward the equivalent of the width of the United States; for Valparaiso is in the longitude of New York, not that of San Francisco.

Immigrants from Europe, who formerly had to add a long and uncomfortable transcontinental journey to their sea journey, will now be set down directly upon the pier of San Francisco, and at a cost, including food, not more than eight dollars greater than the fare to New York.

The density of population in California is fifteen; that of the entire strip of western countries from Alaska to Chile is seven. Across the way China has 275, Japan 350. If we allow one-half of California's area for mountains and give the remainder a density equal to that of Rhod. Island, the population of the

State would be forty millions. There is evidently some colossal leveling-up to be done. Twenty-five years of free influx from Europe will abate the Oriental peril, at least for the present.

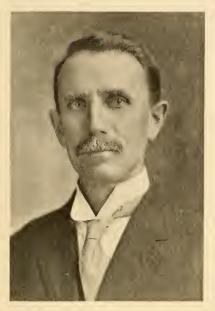
3. The states and peoples of South America are to be drawn decisively nearer to us. Not only are the people of the west coast brought into intimate relations with Atlantic States of North America, but northern and eastern South America will open an entirely new connection with the Pacific States. More than ever is it clear that there is a Pan-American entity. All the Pan-American states have a common interest as regards European entanglements. All must unite on a common basis in administering it and defending it. We have no longer occasion to assert for the purpose any exclusive or unique position.

4. Japan and our Pacific Coast are drawn more closely together into a common area of trade and intercourse. Each will have to know what is going on with the other. Japan's greatcircle route to Panama on her shortest way into the Atlantic passes the Golden Gate only a hundred miles out. Japan is no longer an occasional neighbor. We must make up our minds to settle down and live in the same world, even if not in the same country, with the Japanese. Our misunderstandings must be frankly met and boldly and fully stated,—not glossed over with formal smiles. We and our sons and our sons' sons will have to know them and deal with them. We must get their point of view and understand their case. It is the only way. We cannot ignore them; they are in our world, and very much in it. We have no hope in violence. Wars settle nothing,—not even who is strongest.

The cutting of the Canal is the avenging of Columbus. When he started across the seas he was seeking, not America, but the Old Orient of India and China, and their gold and spices. The heart of men had always yearned unto the East and its riches. There was nothing new in the object of Columbus' search. All that was new was the direction. Columbus went west. Judged in terms of its original purpose, his voyage was a total failure. He started straight for Asia, but ran upon the long, broad dyke of land we now call the Americas. It has cost more than four centuries for him and those who swarmed after him to traverse and conquer the hindering dyke which rose in his path and forbade him Asia. The opening of the Canal is the first cutting of the dyke, the avenging of Columbus, the end of the four-century halt, the resumption of the advance toward the Orient.

THE STATE DEPARTMENT OF EDUCATION

By Edward Hyatt Superintendent of Public Instruction



C ALIFORNIA has a very complete and well organized state department of education. It is built upon a uniform plan with the county educational organizations, and was established over thirty years ago by the adoption of our Constitution. The father of the idea was apparently that venerable sage of our public school system, John Swett, who was the state superintendent during the formative period.

The underlying idea is a combination of an appointive board of education, representing centralized power, and an elective superintendent repre-

senting the people directly. Thus in the county, the county board of education is appointed by the chief executive power of the county, the board of supervisors, and the county superintendent is selected directly by the people at the general election. The superintendent is the secretary and executive officer of the board.

Similarly for the state there is a State Board of Education, appointed by the Governor, as the chief executive of the state, and a Superintendent of Public Instruction chosen directly by the people at the general election, who is the secretary and executive officer of the Board. It is the theory of the law that these two different powers shall be a mutual check and safeguard, each upon the other, and that each shall prevent the other from going very far wrong.

Some educators insist that this divides power and is a bad thing, in that it hampers complete authority in any one power and makes possibility for dissensions and conflicts. Up to date, however, the state has gone on the theory that in a government of the people it is unsafe and unwise to put complete authority into the hands of any merely human being; and a trial of thirty years of actual practice in both county and state seems to show that sincerity and mutual consideration on the part of these two balanced powers will result in safe, harmonious and effective action.

The state educational organization then, consists of the State Board of Education and the Superintendent of Public Instruction, together with their various deputies, assistants and employes, hereinafter described. The members of the Board are seven in number and they are appointed for four year terms. At the present writing they consist of the following individuals: The president is Wm. H. Langdon, a farmer of Modesto, E. P. Clarke is an editor of Riverside, Mrs. Agnes Ray is a housewife and public spirited citizen of Oakland, Marshall DeMotte is a fruit grower of Corning, Mrs. O. Shepard Barnum is a citizen of Alhambra, interested in social and educational progress, Charles A. Whitmore is an editor of Visalia, and George W. Stone is a former mayor of Santa Cruz. The Board is given an appropriation of \$32,000 per year by the legislature to provide for remuneration (\$15 per day during meetings), traveling expenses, salaries of commissioners, expert assistants, clerks, stenographers, and other necessary employes, together with furniture, contingent expenses, office equipment, supplies and the like. The superintendent of public instruction is ex-officio the secretary and executive officer of the Board, as has been stated. The Board appoints three assistants to the superintendent, who are designated as commissioners of elementary schools, secondary schools, and vocational education, each with a salary of \$4,000 per annum, with traveling expenses paid. The Board also appoints a force of clerks and stenographers sufficient to do its necessary work. The Board at times sits as a Retirement Salary Fund Board, to administer the receipts and expenditures of the Teachers' Retirement Salaries, sometimes wrongly called teachers' pensions. This involves a business of a quarter of a million dollars per year. Collections of one dollar per month are made from each working teacher, which, added to five per cent. of the Collateral Inheritance Tax, makes up the resources. The liabilities are a salary of \$500 per year to each teacher who has applied for retirement upon completing a thirty-year teaching period. There are 340 names on the list of annuitants at the present time, making the yearly outgo about \$150,000.

The chief functions of the Board are:

(1) To compile or adopt and to publish textbooks for the elementary schools.

(2) To issue life diplomas and to prescribe the general conditions for granting high school and special certificates.

(3) To study the educational needs of the state, make plans for improving the schools, conduct educational investigations, and recommend changes in legislation.

Thus it will be seen that this lay Board has large discretionary powers, and that it is admirably adapted to initiate and carry out important enterprises based upon the investigations and recommendations of its expert assistants.

Closely associated with and related to this Board is the office of the Superintendent of Public Instruction. The Superintendent receives the same salary as other state officers, \$5,000 per year, and he is given under the law a deputy, a statistician, a stenographer, a bookkeeper, and a clerk. His budget for salaries, contingent expenses and printing approaches \$30.000 per year, of which the largest item is \$12,000 for public printing. Besides being the executive officer of the Board he is specifically invested with the following functions by the law:

(1) To visit and superintend the schools of the state.

(2) To apportion the school funds.

(3) To print and distribute the blanks, books, forms and laws needed by the schools.

(4) To distribute textbooks to the elementary schools.

A new element and an important one in the department is the presence of the three commissioners of education. They constitute a mobile force of expert assistants, for going about the state at a moment's notice where help is needed, for inquiring into educational conditions in the field, for investigating textbooks, for attending school gatherings, for speaking and writing upon educational topics, for digesting the facts which they gather upon their rounds, and for serving as the circulating, vitalizing medium between the formal state department at the capital and the actual school officers at work in the field. They occupy ground midway between the two elements of the department, and tie them together. Probably their two greatest opportunities for real service are in school architecture, touching the vital physical conditions of the children and state textbooks, affecting their intellectual and moral natures.

This is sufficient to give a birdseve view of the mechanics of California's state educational department at the present time. Its spiritual aspirations and activities cannot be measured here. It has been organized upon a liberal and generous scale characteristic of the Golden State. The legislature of 1913 doubled the personnel and the expenditure of the department. This generous increase imposes an added responsibility upon every individual connected with the enterprise, the responsibility for "making good." Their only excuse or reason for being is to improve the opportunity of the children out in the schools. The test of the work of all these persons, all this expenditure, lies in the answer to this question: does it actually result in any better teaching by the 14,000 instructors of the state? Does it result in better opportunity for life for the 400,000 children in the public schools of the state? This must ever be the basis of judgment, as it must ever be the basic test for every one who in any way serves the cause of the public schools.

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Name

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Butte	Mrs. Pearle Rutherford.	····· Oroville
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Yuba	Jennie Malaley‡	
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County Superintendents are Secretaries of their respective County Boards of Education.

*Counties containing Kindergarten Schools.

†Counties having appointive Superintendents.

[‡]Photograph could not be secured.

**Photograph in Council Group.

City Superintendents of Schools

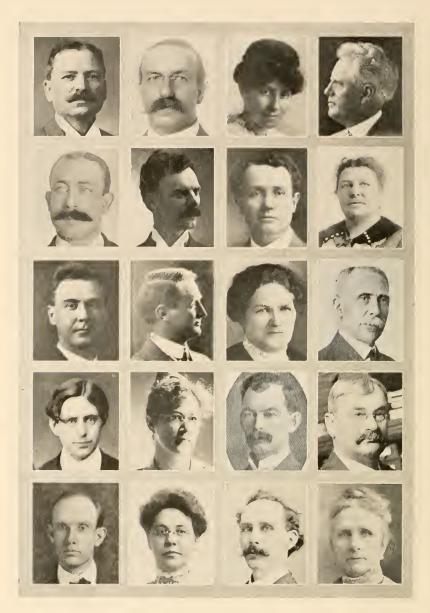
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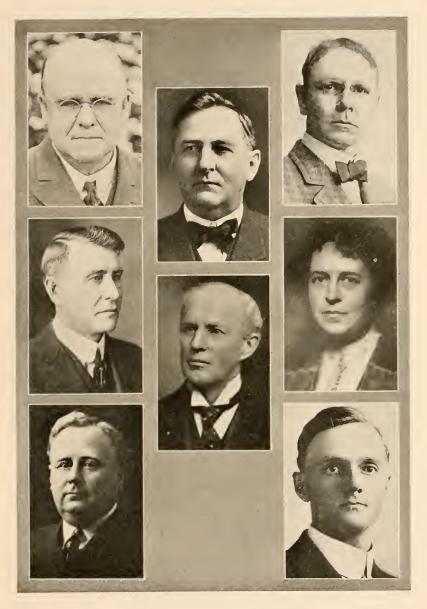
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SIERRA EDUCATIONAL NEWS

The Official Organ of the California Teachers' Association

ARTHUR HENRY CHAMBERLAIN, Secy. of the Council, Editor

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CALIFORNIA COUNCIL OF EDUCATION By E. Morris Cox, President



HE present form of organization of the California Teachers' Association has been in operation since January, 1910. Two years' previous a resolution was adopted in the organization then known as the California Teachers' Association. calling for the appointment of a committee to consider the advisability of reorganizing the teachers' organizations in a manner that might more fully represent the whole State, bring closer unity and co-operation, and provide means for more effectively accomplishing the will of the organizations. A year later this committee, of

which Mr. James A. Barr was Chairman, made a report which outlined at length many proposed departures. This report was adopted unanimously. The following are the recommendations made in that report:

1. "That the incoming president of the California Teachers' Association be requested to call a meeting of the presidents and secretaries of the various teachers' organizations for the earliest possible date in January.

2. That at this meeting at least three matters be considered, viz.: (a) A concert of action on matters of common interest for the year 1909; (b) Plans for affiliation; (c) School legislation.

3. That the president of the California Teachers' Association be requested to arrange for a joint conference, not later than July of each year, with the presidents and secretaries of the various departments to harmonize programs, avoid duplication of work and secure the active co-operation of each department in general plans of the association and of affiliated organizations.

4. That the Board of Directors of the California Teachers' Association be urged at once to consider the feasibility of establishing a high-class educational monthly journal, with the hope that such journal may have sufficient merit as to fully warrant the State Board of Education in designating it as the official organ of the Department of Public Instruction.

5. That the Board of Directors be urged to appoint at the carliest possible moment a permanent salaried secretary, capable of directing the affairs of the association and of editing any journal that may be established."

A salaried secretary was employed immediately and a month later an official journal—The Sierra Educational News—was issued. In April, 1909, the presidents of the various associations in the State agreed upon a plan for the affiliation of these organizations in a State Council of Education. Their proposal of the duties and purposes of the Council reads as follows:

1. "This council shall be a permanent committee on legislation to represent the educational interests of the members of the associations.

2. It shall have authority to establish and support an official means of communication with the members of the associations.

3. It shall have power to deliberate on educational questions, policies and reforms, and to make recommendations regarding the same.

4. It shall have power to take action upon all questions referred to it by the associations.

5. It shall have power to choose its own officials and define their duties."

This proposed plan was submitted to the various organizations at their annual meetings during the year 1909 and was ratified by each one so that in December of that year a temporary organization of the new Council was effected and plans made for the annual meeting in April following, at which time the permanent organization of the present Council of Education was perfected. At this meeting a committee was appointed to draft by-laws and articles of incorporation. These were completed and adopted the following October. At the first meeting this statement of the need of an official journal was adopted:

"We regard a means of communication as indispensable to any effective plan of affiliation. We believe that a monthly journal is necessary for the dissemination of educational doctrines and for the proper support of these doctrines. We believe that an effective co-operation of the teaching body of California with its representatives in this Council demands such a means of communication."

For five years the California Council of Education has had a permanent secretary and an official journal. For five years this Council with its secretary and journal has been attempting to

fulfill the purposes for which it was established. The membership in the affiliated bodies has increased in that time from 6,000 to 10,000 members. The News has gone to each member ten times in the year. The Council has taken an active part in legislation. During these five years many important matters of school legislation in which the Council took the initiative have been enacted. The present tenure law was the first. The reorganization of the State Board of Education, apportionment of school funds upon attendance of pupils, teachers' retirement salary law, local district taxation and amendment of certification laws are among the most important of the enactments which have had an active Council support. The objectionable proposals that the Council has helped to defeat are of no less importance. This is a very brief review of the Council's work. Whether the results have justified the organization of the State Council no doubt will be interpreted differently according to the views of the interpreter as to the meaning and importance of "In organization there is strength."



MARIPOSA COUNTY INSTITUTE John L. Dexter, Superintendent A Next-to-Nature Institute, Held in the Yosemite Valley

THE CALIFORNIA COUNTY LIBRARY SYSTEM

By Charles S. Greene, Librarian, Oakland Free Library

The library takes itself very seriously these days. It has thrown off the hampering traditions that confined it to either end of its wide field. It is neither the cloistered retreat of the bookworm, nor the purveyor of the lightest of fiction for those to read who have nothing else to do. It claims to be an integral part of public education. Its work is not so intensive, perhaps, as that of the school, but so much more extensive that it claims to be universal, having a duty toward every member of the community it serves, and all through the lifetime of every member.

Its methods differ from those of the school chiefly in this: The school commands attendance and compels attention to its teachings; the truant officer and the ferrule enforce these things. The library must entice and persuade; for the idea of compulsory library membership would be an absurdity. The overcoming of this very handicap—if it be one—has been the cause of the library's progress—it has had to make itself attractive first, and then so useful as to become indispensable. If this be true in municipalities, as it has proven, much more is it true in rural districts where means of instruction outside of books are fewer.

Universal and complete library service—this is the ideal that the library leaders of California set themselves. To attain an approach to it two methods were obvious. There was the method of creating a library in every township, which has been done in Eastern States as Massachusetts. But this method was evidently unsuited to California. Generations would pass before this solution could become measurably applied, and when applied it would not be satisfactory. In a unit so small in taxable values the income realizable for library purposes would be so little that nothing like professional library service could be employed and no adequate supply of books could be maintained.

The second method of reaching all the people is that of the traveling library system, by which a central agency sends circulating cases of books wherever a small group of people ask for such service. In California the central agency best able to undertake this scheme is the State Library, which since its liberation from narrow laws in 1901, has had the duties of a library commission. A full and fair trial was made for several years. By that time 278 traveling libraries were in service, and the bill for freight and express was climbing so fast that it became evident that long before any true success in covering the State could be had, the system would break down under its own weight, because of its unwieldly size.

But if the township was too small and the State too large, the clear conclusion was that the intermediate unit, the county, was the proper one for the purpose. County libraries there were in several states, and laws permitting them, usually framed to suit some particular library. To Mr. James L. Gillis, State Librarian, is due the credit for the discovery that the county library, elsewhere sporadic, could be made into a system to cover a state. It was tried out in Sacramento County by contract with the Sacramento City Library in 1908, without much color of law, but it worked so well that the Legislature in 1909 passed a law authorizing the establishment of county libraries. Defects in this law were corrected in 1911 by the next Legislature, and since that time growth has been rapid.

The most efficient cause in this expansion has been the welldirected effort of the State Library, acting in its capacity of a Library Commission and through its able organizers. These organizers had been all over the State, helping in the establishment of municipal libraries until such libraries were in operation in practically every town large enough to maintain real library service. Turning their attention to the counties, the State Library organizers preached the new gospel of the county library effectively and well. Most active of all has been Miss Harriet G. Eddy. A High School teacher at Elk Grove, in Sacramento county, she had been the custodian of the first deposit of county library books. Her good use of these books, her keen appreciation of the benefit the system brought to her, her enthusiasm in telling others the good news, made Mr. Gillis, always quick to see such chances, secure her services as the apostle of the county library. She has gone over the State, visiting supervisors, talking to clubs, granges, schools, churches, and groups of people wherever they would listen, explaining the law, showing the advantages of the system, and telling of the satisfaction of all those who had established county libraries.

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Seconding her now is Mrs. May Dexter Henshall, for some years Superintendent of Schools in Yolo County. Her mission is to aid in bringing the schools of the various counties into the same close and helpful relations with the county library that made Yolo county a pioneer in this matter.

The law is too long to quote in full; copies of it, as well as copies of other pamphlets on the County Library system, may be had by writing to the State Library at Sacramento. The chief merit of the law, perhaps, is its liberality. No Procrustean system is laid down, to which every county must conform, but the essentials are well guarded. Service must be rendered to the whole county; for no town not maintaining a library may stay out. There must be a skilled and tested head to the system; for no one may be a county librarian who has not passed muster before a Board of Examiners, consisting of the State Librarian and the librarians of San Francisco and Los Angeles. This skilled librarian has the choice of subordinates and the selection of books, but boards of supervisors, holding the power of the purse in all matters except the librarian's salary, exercise a general control.

A few counties where there were large libraries at the county seat, though not all such, have taken advantage of an alternative provision which allows a county library to be established by contract with an existing library to serve as a county library. Towns in any county establishing a county library that already have libraries of their own may stay out of the system altogether, or may come in as parts of the county library, or may contract for partial service, or may come in and then go out again at will. The only requirement is that there shall be library service in the whole county.

The counties that have adopted this system are given below. In this list San Francisco is omitted, because as a co-terminus city and county it has had a county library ever since 1878.

Established 1908, Sacramento; 1910, Santa Barbara, San Joaquin, Fresno, Madera, Merced, Tulare, Yolo, Alameda and Kern Counties; 1911, Riverside and Stanislaus Counties; 1912, Imperial, San Diego, Kings, Santa Clara, Monterey, Los Angeles and San Mateo Counties; 1913, San Bernardino, Contra Costa, Butte and Inyo Counties; 1914, Solano, Glenn and Humboldt Counties; 1915, Ventura, Siskiyou, Colusa, San Luis Obispo and Modoc Counties.

THE PHILIPPINE PUBLIC SCHOOLS—SOME SALIENT FEATURES

Frank L. Crone Director of Education for the Philippine Islands



T O understand and appreciate even the most striking features of the Philippine public school system, it is necessary first to know a few Philippine facts.

Discovered by Magellan in 1521, the Islands have enjoyed a European civilization for more than three hundred years. The Filipinos are Malays, and Christians, the only Christian people in the Far East. Their 3000 islands have an area as large as that of the New England States and New York combined, and support 8,000,-000 people. There are about 40,000 Chinese, 8,000 American civilians, and several thou-

sand Spaniards and other foreigners. English has been the language of instruction in the public schools since 1899 and is the official language today; it is much more widely understood than Spanish. As their mother tongue the Filipinos speak numerous dialects of the Malay language. The cost of the Philippine schools, and of the entire Government for that matter, is paid by the Filipinos themselves. The system now embraces 4200 schools in all parts of the Islands, with an enrollment of 600,000, and employs 530 American teachers and nearly 10,000 Filipino teachers.

In the Philippines we believe that public schools exist for the purpose of giving to each and every citizen an education which will fit him for the freest, happiest and most efficient life possible in the sphere to which his activities will probably be confined. It is this understanding of what the public schools should be that has guided the Philippine authorities in establishing a school system adapted to economic, social and political needs.

The big general fact in the entire organization is the centralized control which the Director of Education exercises and which gives effectiveness to the school program. Fifteen years of experiment have produced a balanced curriculum which is uniform throughout the islands, with three phases: academic instruction, industrial work and physical training; each of these lines is essential to the progress of the pupil in his school work, and no pupil is advanced without successfully accomplishing the part assigned to him in each.

The subjects which make up the academic studies have been arrived at through experiment and careful study of Philippine needs. They are taken up from the Philippine viewpoint. Absolutely all of the instruction is in the English language from grade one through the eleven years which complete the high school course. Most of the textbooks have been written for Filipino children, and they are the same in all public schools.

The industrial program is based upon the economic conditions which obtain in the Philippines. The aim is first of all towards improvement in the standards of living, and then towards industrial and commercial development upon a very large scale. From the lowest grades up there is a differentiation in the work for boys and girls. After providing the boys with the industrial fundamentals for earning a livelihood and the girls with instruction in homemaking, the big industrial task is to teach household industries which will provide an income embroidery, lacemaking, basketry and the numerous other handicrafts,—to extend then from the school to the home, and to control along business lines the industries thus established.

In physical training the school efforts have resulted in one of the most comprehensive recreation and athletic movements in history. More than 95% of all pupils enrolled in the schools engage in some form of physical training, playground, social and group games, and a highly organized system of competitive games such as baseball and track and field events. Far from being confined to the schools alone, this movement reaches all classes of the population, and will be a most important factor in molding the character of the rising generation.

The social conditions which exist in the Islands have made it necessary to group the eleven years of school work in three periods—four years of primary, three years of intermediate, and four years of high school work. The courses of study for each of these groups have been so adjusted that the end of each period finds something definite accomplished, and the pupil may to advantage drop out at the end of the primary or intermediate, if he must. Most pupils will never get more than the four years of the primary work; hence the instruction in hygiene and sanitation, training for citizenship, lessons in good manners and right conduct, and the special industrial foundations for boys and girls. In the intermediate courses, vocational specialization is begun, to fit the pupil for earning a livelihood at the end of that course. In the secondary, the pupil may continue his vocational work or lay the foundations for a profession.

Another salient fact in the Philippine public school system is the campaign for adequate school buildings and sites, a campaign which is rapidly establishing standard permanent school buildings throughout the islands on sites which provide adequately for gardening, playground and other Philippine school essentials. The minimum site is 1½ acres for rural schools.

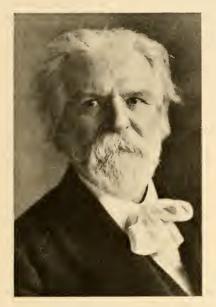
The extent of this present school system must be emphasized; the 4200 schools reach the farthest islands, the remotest mountain settlements. At the present time some 600,000 children enter school each year.

The progress of public school work in the Philippines and the number of things to be accomplished in instructing an entire community have led to activity far beyond the field of education proper, and indeed into a big work of social economy; the public welfare movement with its social centers, health, hygiene, sanitation, settlement work, citizenship instruction, the great recreation movement, and many other features which make for social advance, have found a legitimate place in the school program. In this work the schools are becoming more and more a powerful influence. Good school buildings, extensive school sites, the efforts of thousands of teachers and hundreds of thousands of pupils are being used in improving the conditions generally. Many of the things the children learn in school are 'to be communicated to their elders at home.

The three principal features in this centralized system, are that physical training is making for a better and stronger race, industrial and vocational guidance is providing for high home standardscand for commercial advantage, and the academic in-'struction is the instrument of a great intellectual awakening.

MY LINCOLN POEM

By Edwin Markham



BRAHAM LINCOLN is one of my heroes not because he was a President of the United States, but because he was a patriot of humanity—not because he ruled the Republic, but because he ruled his spirit.

The heroic principle is only another name for the unselfish principle. Heroism is devotion to the Good. Every deed of kindness done without thought of reward, is heroical. The heroes are not all on the battle-field. Those who walk the humble roads can be heroical as well as those who tread the highways of the world.

The young Lincoln struggling on in his lonely log cabin in the wilderness was as heroical as when he stood for conscience in the council chambers of the nation.

Now that the cloud of Civil War has faded from the horizon, Abraham Lincoln and Robert E. Lee are seen by all of us to have been men of character, men who bravely followed the star of conscience. Of Lincoln it may be said that he is honored in the South as highly as in the North. Our southern people feel that his assassination was perhaps their greatest misfortune; that after the war their hopes would have been safe in his generous heart, their interests secure in his friendly hands.

Always there must be lofty souls to keep alive the ideal principle in a nation. Lincoln was such a soul. He has become a lighted tower toward which the eyes of the people turn in their nobler moments. He has become our national ideal, continually inspiring the manhood of the Republic. As an ideal he is a greater safeguard to the nation than all her battleships.

It was with these emotions in my heart that I wrote my poem in honor of the great commoner. And at this point the Editor urges me to tell the circumstances of the writing. Let me say, then (and say for the first time) that some fifteen years ago, in New York City, I was invited to write a poem to be read at a banquet at Delmonico's, in commemoration of the Lincoln birthday. I took three weeks for the task. Day after day, I went into my study to ponder on the character and career of the martyr president. I waited on the Muse, but nothing was given me: my mind was empty of ideas.

The days crept by until only three days and three nights remained; and suddenly I resolved to watch the nights away; and two nights went by but the Muse remained as silent as the Sphinx on the Lybian sands. And thus I entered upon the third and final night with not a word of the poem written. As the dark hours wore away, I held calmly to my purpose—resolute to win, yet strong enough to fail.

My pen was dipt and ready. The hand of the clock crept on to the three in the morning, on to the first cock-crow, to the hour when startled ghosts flee back to their dim retreats. Then a strange thing happened: in a few brief moments the idea of the whole poem rushed upon me. The lives began to gather in the mind, and soon the pen was flying happily over the pages. In two hours the poem was completed and ready for the reading, ready as the rose of dawn was softening the east.

I append hereto the recently revised version of the poem. It is dedicated to the boys and girls of America, with the hope that it will help a little to increase their love and reverence for the great friend of humanity.

LINCOLN, THE MAN OF THE PEOPLE

When the Norn Mother saw the Whirlwind Hour Greatening and darkening as it hurried on, She left the Heaven of Heroes and came down To make a man to meet the mortal need. She took the tried clay of the common road,— Clay warm yet with the genial heat of earth— Dashed through it all a strain of prophecy, Tempered the heap with thrill of human tears, Then mixed a laughter with the serious stuff. Into the shape she breathed a flame to light That tender, tragic, ever-changing face. Here was a man to hold against the world, A man to match the mountains and the sea. The color of the ground was in him, the red earth; The smell and smack of elemental things: The rectitude and patience of the cliff; The goodwill of the rain that loves all leaves; The friendly welcome of the wayside well; The courage of the bird that dares the sea; The gladness of the wind that shakes the corn; The pity of the snow that hides all scars; The tolerance and equity of light That gives as freely to the shrinking flower As to the great oak flaring to the wind— To the grave's low hill as to the Matterhorn That shoulders out the sky.

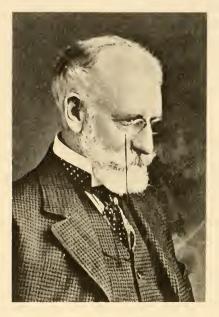
Sprung from the West, The strength of virgin forests braced his mind, The hush of spacious prairies stilled his soul. Up from log cabin to the Capitol, On fire was on his spirit, one resolve— To send the keen ax to the root of wrong, Clearing a free way for the feet of God. And evermore he burned to do his deed With the fine stroke and gesture of a king: He built the rail-pile as he built the State, Pouring his splendid strength through every blow, The conscience of him testing every stroke, To make his deed the measure of a man.

So came the Captain with the mighty heart; And when the judgment thunders split the house, Wrenching the rafters from their ancient rest, He held the ridgepole up and spiked again The rafters of the Home. He held his place— Held the long purpose like a growing tree— Held on through blame and faltered not at praise. And when he fell in whirlwind, he went down As when a lordly cedar, green with boughs, Goes down with a great shout upon the hills, And leaves a lonesome place against the sky.

LIFE IN THE OPEN IN CALIFORNIA

By Charles Frederick Holder, LL.D.,

Throop College of Technology Author of "The Channel Islands of California," "Life in the Open in California," Etc.



N the modern system of Education, as found in schools, colleges and universities, athletics, so-called, have a distinct place. It is assumed that to enable a man or woman, boy or girl to acquire the rudiments of education, a healthy, robust body is a fundamental requirement. With this in view, the environment of the school or college becomes of prime importance and it is this feature to which the present writer would call attention in the State of California.

Physical health is the dominant note of the day and possibly no where in the world

have students as splendid a playground as in this State. Extending along through many degrees of altitude, with every possible climate under the sun, except the extreme tropics, with physical conditions unequaled, vast mountain ranges, typical deserts, climatic conditions of rare perfection; great river systems, the broad Pacific along its shores; regions where the greatest fall of snow is recorded; others where the rustle of the palm fills the air with melody;—California is indeed a land of distractions, beauties and compensations, and may well be considered the playground not only of its own people, but of all America.

California has the Sierra Nevadas as its spinal column and the fine Coast Range as an outer guard. In these great mountain systems and their lakes, rivers, canyons and verdant labyrinths, the Alpine climber finds the opportunity of a lifetime, at home. There are little hills for little people; big mountains for the Sierra Club and what compensations await beyond the mere

climb—the rarified atmosphere, the deep blue heavens and the Alpine flora. The Yosemite is the real gateway—a hollow of the hand of Infinity, with its pendulous falls. Here are forests that were old when Christ taught the Gospel of Peace and Good Will toward men. To the north we find the Yellowstone Park and in the Santa Cruz mountains, a part of the Coast Range, the splendid forests of the Sempervirens, the common redwood, the cousin of the giants of the Sequoia.

The Sierra Nevada abounds in splendid lakes, as Tahoe, Klamath and others; crystals of azure in settings of emerald, abounding in sport to the lover of rod and reel; all lures to entice youth, men and women out of doors and keep them there. Walton has told us that there is no sport like angling for the philosopher or contemplative man, and it need not be surprising if California lays claim to the finest trout fishing in the world. Here is the home of the rainbow, the steel head, and the golden trout. Countless snow born streams rise in the High Sierras, and flow to the Sea, as the Kern, Merced, Santa Clara, San Gabriel, San Lorenzo, Klamath, Truckee, Sacramento and a thousand more; all abounding in trout of some kind and affording the finest of sport. The mountains of California abound in canyons, deep radiating gulches of radiant beauty, filled with trees, ferns, the fragrant bay trees of the West, and others. They mark the escape of the winter rains and form green channels which lead the waters to the distant sea, where the deep Black Current of Japan flows along bearing powers of necromancy. All these canyons are, especially in Southern California, as the San Gabriel. Millards and the Arrovo Seco at Pasadena, natural parks luring the walker or lover of nature on and eternally on into the ranges of the Sierra Madre, where the life is in the open without a single disturbing element. Even the seasons conspire to render this lure as fascinating as possible, as the rain comes in the so-called winter, or from November to May. June, July, August, September, October are practically rainless and with electric storms at rare intervals in the Southern Sierras and along the shore. In the winter the rain will amount to half the annual fall of that of New York or Boston perhaps, yet sufficient to cover the country with a field of the cloth of gold, the stamp of this strange winter, cool, crisp and strengthening; hence the lover of nature

has a land in which life in the open is always possible, and the mountains are always green; the canyons always tuneful arbors of verdure.

The Southern Sierras rise abruptly from the land to peaks 8,000 to 12,000 feet, the San Bernardino, San Jacinto, San Gorgonio, and in the north, peaks as Mt. Whitney and Shasta lend dignity and majesty to the landscape. In other places, as the San Gabriel Valley, the monutains go tumbling away to the sea in broken ranges, to end in sand dunes which line the long reaches of the Coast or are lost in little lagunas that glisten in the sun along the shore.

California shore lines are mostly sandy. In Southern California they are dotted with towns and long piers run out in the Pacific, not for commerce, but to aid in keeping Californians out of doors. I recall one, on a long open coast, with the blue sea en guarde. At the entrance is a bunch of big bamboos. You select one, buy your bait and go out on the pier, that may be a mile or so long, and join the angling throng. This is an angling pier and the oldest inhabitant could not remember a ship docked there, nor was that the intention. All along shore you may find anglers with these big rods fishing for surf fish, a toothsome dainty. From the shining sands, far away at sea, we catch glimpses south of Point Firmin, of mountain peaks. These are the tops of off-shore Sierras which have been pushed up out of the ocean back in the early Tertiary periods, and are famous playgrounds, lures to the weary, and better known as the Channel Islands. Off Santa Barbara lies one group, famous in the days of Junipero Serra and the fine old missions that dot the shore along the Camino Real. Here are the Santa Barbara Channel Islands, an off-shore Sierra running east and west, separated by narow but deep channels: San Miguel, Santa Rosa, Santa Cruz and Ana Capa, all at one time, the home of thousands of natives whose kitchen middens are still to be seen. These islands are dominant factors in the out door life of the region, winter and summer.

Drifting to the South, as we are now yachtsmen. in imagination, we come one hundred and fifty miles or so south of Santa Barbara to the Channel Islands of the Santa Catalina group. There are four: San Nicholas, famed for its Lost Woman, over 100 miles at sea; Santa Barbara Rock of a few acres; Santa Catalina, sixty miles around, twenty-two long and about twenty miles from the mainland, and San Clemente, nearly as large as Santa Catalina, twenty miles long and forty miles off Los Angeles. San Clemente is government property and, all in all, the most extraordinary big game fish region known. Santa Catalina is the only one of the islands equipped with regular ocean steamers for transportation. It also has the town of Avalon and a summer population of 7,000 or 8,000, with all the appurtenances of modern resorts without the garish Coney Island features. Santa Catalina is so essentially a feature in the out door life of California that it deserves particular mention. You will notice in California that the strong west wind (not a trade) blows in every day, rising about ten and stopping late in the afternoon. Santa Catalina is so situated that it has a lee, the north side (of twenty miles) often affording quiet, lake like waters, though thirty miles at sea. Fame came to it on account of the beauties of Avalon Bay, its wealth of rare animal life, being the home of the Paper Nautilus, among others. Then the mighty Leaping Tuna makes its summer home here, amazing observers by its leaps. Nowhere along any shore is there a better camping ground, and in mid-summer the Young Men's Christian Association will have its standard in one canyon, some school in another, and hundreds of people from the hot regions of Arizona, New Mexico and Texas are living here in a Canvas City beneath the fragrant leaves of the giant Australian Eucalyptus.

You are thirty miles out at sea, sheltered by the hills from the strong wind; you face the bay and the mainland. There will be no storms of any kind from May to November, no rain, and the air is cool and delightful. I dwell on this, as here is characteristic Californian life in the open at its best, by the Sea. There may be six thousand persons here. The two boats a day from Los Angeles bring and take twelve hundred, and hundreds come and go in yachts with which the little bay is filled, not to speak of the fleet of glass-bottom boats employed to examine the beautiful kelpian forests that cover the slopes of this island mountain.

Sea angling is the chief sport. Here is the Tuna Club with its fish museum of trophies, testing credulity, with giant fishes taken with delicate tackle. Here anglers congregate from all over the world and try conclusions with the great Santa Catalina swordfish, the eastern variety, the black sea bass of three or four hundred pounds, the game yellowtail, twenty to forty pounds, the beautiful white sea bass of fifty pounds, and many more, all taken with rod and reel.

The Tuna Club offers beautiful prizes for the largest fish with lightest tackle, the idea being to encourage fair play. This island is now a Fish Reservation and protected from netting of all sorts which has threatened it for years. Camping, automobiling, coaching, trail and mountain climbing, tennis, bathing and water polo are a few of the sports and pastimes of this offshore playground. The summer, as well as the winter, gives it a peculiar emphasis as an out of door land.

When the East is blanketed with snow, thousands seek the Pacific Coast because they can spend every day of the winter out of doors. The State roads are a revelation. There are more motor cars in California than in any other state. Especially in the south, a network of fine asphaltum roads cover the country from Los Angeles to San Diego—up in the San Bernardino mountains, in the range back of San Diego, in the valleys along shore. Even at Santa Catalina there is one of the finest motor roads in the country, from Avalon to Howlands, twenty or thirty miles over the mountains and overlooking the sea.

Everywhere from Burlingame, near San Francisco, to Coronado, one finds Country Clubs, which are centers of out door interests in winter: Santa Barbara, Pasadena—the latter has four, Altadena, Annandale, San Gabriel and Midwick—Los Angeles, Coronado, Avalon, San Diego, Riverside, etc. Here golf and tennis rage, while at Burlingame, Pasadena, Riverside, Santa Barbara and Coronado polo holds the field.

Then there are great out of door festivities. Chief among them is the Pasadena Tournament of Roses, when thousands gather to see the games and sports possible in California on January first; when the chariot races of old Rome are run, great football and polo teams contest, Spanish games are revived, the Sierra Madre, capped with snow, looking down on the valley of San Gabriel and its wealth of flowers, a land of the orange, lemon, olive and vine. It is this wonderful climate, this possibility of life in the open in winter, that has brought five hundred thousand people from the East and Middle West to Los Angeles in twenty years, and seen the cutting up of the great ranches of the north. It is the possibility of life here through the year, winter and summer, that has made all California a playground for all the people all the time.

EL CAMINO SIERRA

The Third Trunk Highway for California and Its Importance to the State

By W. G. Scott

Executive Secretary, Inyo Good Road Club; Chairman Division of National Parks, Member Council of National Advisors, National Highways Association.



BRIEFLY expressed, California's highway system as provided by the Highway Act, consists of two main-trunk lines extending the length of the State from Oregon to Mexico. One is along the coast, the other approximately parallel, east of the Coast Range, traversing the length of the great valleys in the interior.

With these two trunk lines, the county seats of outlying counties are to be connected by lateral or branch highways, which enter into and become a part of the general system. This plan for all that part

of the State, lying west of the summit of the Sierra Nevada Mountains seems adequate—but conditions are very dissimilar in that portion lying east of the Sierra Nevadas, which is a large and important part of the State, sometimes designated as Trans-Sierra California, consisting principally of Modoc, Lassen and Plumas counties in the north, and Alpine, Mono and Inyo counties in the eastern center—all bounded by Nevada on the east.

There are many Californians in the great valleys and along the coast who are prone, either to regard the crest line of the Sierras as the eastern limit of the State, or to under-estimate the importance of that vast territory lying east of the Sierra Nevadas, yet inside the boundary of California.

To afford a slight idea of the extent of territory in the six counties named, we will select a single county, Inyo, with an area of 10,019 square miles, within which you could put the whole State of Massachusetts and still have enough left for a fair-sized county. Inyo and Mono county next on the north combined, have an area of 13,049 square miles. While Belgium, with more than six million inhabitants and 2,900 miles of rail-road, has an area of only 11,400 square miles.

The county seats of these five large and important Trans-Sierra counties cannot be connected directly with the main trunk line of the valley because of the great barrier of the Sierra Nevada Range from 12,000 to 14,000 feet in height which intervenes. The Pit and Beckworth Passes in the north are the most feasible routes for laterals to connect with the Valley trunk line the county seats of Modoc, Lassen and Plumas counties, while the Sonora and Tioga Passes farther south afford connection for the county seats of Alpine, Mono and Inyo counties.

But there are other very important physical conditions which must be taken into the consideration of highway connection for Trans-Sierra California. The eastern slope of the Sierra Nevada Range is precipitous with a notable absence of foothills, which admits of a highway along the east base of the Sierras from Los Angeles to Lake Tahoe that has been formally christened El Camino Sierra, and which for a long time has been an established route for travel through Kern, Inyo and Mono counties and the towns of Mojave, Lone Pine, Independence, Big Pine, Bishop and Bridgeport.

From the last-named town to Lake Tahoe, about seventy miles north, is a road authorized by the State and nearly completed, through Markleeville and Woodfords in Alpine County. Lake Tahoe is the terminus of a State road from Sacramento, hence Bridgeport, the county seat of Mono County, is joined to the State road system, which circumstance makes it a desirable point of connection for the road from the county seat of Inyo County, Independence, about 140 miles south. This fact has been duly recognized by the Highway Commission and it now has a survey force in the field moving north from Independence towards Bridgeport, preliminary to work of construction.

El Camino Sierra is intersected at Big Pine by a transcontinental highway from New York City—the MidlandTrail. This great cross-continent route has been surveyed and mapped its entire length by the American Automobile Association and it has been incorporated in a projected system of National Highways, by the National Highways Association. At Mono Lake, El Camino Sierra is intersected by the Tioga Pass Highway, lately acquired by the Federal Government.

With the assistance of Los Angeles and Kern counties on the south and the further aid of convict labor where necessary. it is assured that in the near future the road known as El Camino Sierra will be a bonleyard the entire distance from Los Angeles to Lake Talioe. This to-be-world-famous highway should be continued north from Tahoe through Truckee, Sierraville, Onincy, Susanville and Alturas towards Lakeview, Oregon. This would make a third main trunk line east of the Sierras, affording much needed opportunity for communication between adjacent counties and by laterals through the passes named, connection with the main trunk valley system. In. addition it would permit direct access from the east to the proposed National Parks of Mount Shasta and Mount Lassenthe live American volcano, which now enables California to compete with Italy, and to Lake Tahoe, to the world-famed Yosemite and to the proposed, enlarged Sequoia Park farther south that will surpass in magnitude anything of the kind in either the old world or the new.

With this accomplished, there would be made accessible an extensive area of the State hitherto neglected, where enormous resources promise rich reward for development.

Astonishing as would be the local benefits, scarcely less surprising would be the State growth and prosperity resulting from the myriad of tourists attracted by the magnificence of Shasta standing at the northland gate, the grim and weird Lassen helpless victim of a hidden giant in a destructive mood; beautiful Tahoe, that inland sea of liquid emerald whereon are mirrored the clouds of day and the stars of night; Mono, the Dead Sea of the West, where the very desolation lends entrancement to the scene; Yosemite, that masterpiece of Creation; the Inyo Glaciers, and Mount Whitney nearest the sky—the monarch of all the mountain kings—the first in all of California to receive each morn the greeting of the regal Sun and the last each night to receive his parting benediction.

The foregoing is but slight suggestion of the importance of the highway with a hundred by-ways, each by-way with a hundred wonders—El Camino Sierra.

SUNRISE OVER THE SIERRAS

By Henry Meade Bland

I mind me how one day-break long ago, I heard the wild swan play his magic horn; Heard the cold north wind blow his pipe forlorn; Heard the sweet stream purl gently to and fro In oaten meadows; while the lyric flow Of field-lark hymn called to the splendid morn Until the sun, a light divine, new-born, Lifted,—a wild flash o'er the virgin snow.

Then stood I like the holy orient priest, Who gave to fire a mystic sacred name, And ever burned his altar in the East; Or like the Poet-king who raptured came At morn, as to a pentecostal feast, And saw Jehovah in the Rising Flame!



THE EXPOSITION—ITS PURPOSE AND HOW TO APPRECIATE IT

By Alvin E. Pope,

Chief, Departments of Education and Social Economy



XPOSITIONS had their origin in the early trade fairs and festivals. As these developed they were gradually transformed from an exchange of goods to an exchange of ideas. The modern International Exposition collects the latest ideas in all fields of human activities, displays them graphically and arranges them so as to present a panorama of present civilization suggesting the trend of future progress. Most of these ideas were previously confined within a very restricted territory or known to a very limited number of experts. The Exposition disseminates these

ideas throughout the world, not only originating many worldwide movements, but giving great impetus to movements already under way.

The Chicago Exposition was followed by a widespread campaign for the beautifying of our cities. The St. Louis Exposition added new impetus to this movement, and through the German exhibits, brought about a change in our method of home construction and interior decoration. The Panama-Pacific International Exposition will give further effect to these movements and in addition introduce new color features and new forms of lighting and illumination. The Congress of Religions at the Chicago Exposition pacified the intense antagonism among religious creeds and organizations, and brought about a better spirit of toleration and co-operation among the churches. The St. Louis Exposition was marked by the great force it gave to the arts and sciences. The Department of Social Economy of the Panama-Pacific International Exposition was planned with the hope that this Exposition would be followed by increased activities in all fields of social service.

It was impossible to secure a separate building for the Social Economy exhibits, so they were housed in four different buildings. Exhibits from various nations, states, municipalities and national organizations occupy about one-half of the Palace of Education. Most of the United States Government Social Economy exhibits and of many publishing houses fill about onefourth of the Palace of Liberal Arts. Banking, Insurance and Industrial Welfare exhibits cover nearly one-fourth of the floor space of the Palace of Mines, and the New York City building contains the entire Social Economy exhibit from that city. The scattering of exhibits has somewhat interfered with the efficiency of the Department, and for lack of adequate space many important exhibits which had been planned and financed were abandoned.

The policy of the Department of Education was to secure exhibits by invitation and to confine each exhibitor to some special educational feature in which he excelled and in which he was able to teach the world a lesson. In each case it was not only necessary to secure the co-operation of those invited, but in addition to arrange means of financing the exhibit. By thus selecting all attainable high peaks of modern educational progress, the Department hoped to prevent unnecessary experimental work and to direct all efforts toward the ideals attained by the most progressive educators. With this accomplished it will result in a saving of time and energy of thousands of teachers, of hundreds of thousands of pupils, and of millions of dollars.

In visiting the Exposition avoid a large party. One can profit more by being alone or with not more than two companions. Purchase a guide book. It will be useful here and at home. Secure a general view which will give an idea of its underlying principles. This can be done by taking one of the white cars or roller chairs near the Fillmore Street or Ferry entrance and come down the Avenue of Palms, through the Avenue of Nations, to the Massachusetts building, returning along the Marina. Starting at Machinery Hall, come leisurely back through the courts, circling the lagoon in front of the Fine Arts building. This trip should be made both by day and by night. Do not hurry. Enjoy it—You will absorb much.

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Beginning at the Palace of Education, make a leisurely survey of the various exhibit palaces, passing through Liberal Arts, Manufacturers, Varied Industries and Machinery Hall, returning through Mines, Transportation, Agriculture, Food Products, Fine Arts and Horticulture. Then visit a few of the foreign and state buildings in the same manner. Most of these buildings are not open for inspection until after eleven o'clock, while the exhibit palaces are open at nine.

After this casual survey begin the thorough study of some particular exhibit of interest. Follow this up by an exhaustive study of as many exhibits as possible. You will find most of them arranged for the casual inspection of the general public, but containing information for the amateur, material for the professional and suggestions for the trained expert. Each visitor will find that he himself belongs first to one and then to another of these classes, and that he will benefit in proportion to the effort and time he devotes to serious study.

An eminent educator accepted, at a great sacrifice, a position as a member of the International Jury of Awards on the theory that he always received more than he gave in such work. He had been searching years for a plan of reorganizing his Department of Sociology. When he saw the Social Economy exhibits displayed here, he knew exactly what he wanted. They had suggested a solution of his problem. He is now reorganizing that department in the university of which he is the hcad.

Study exhibits. Study them diligently and exhaustively. Your pleasure, appreciation and benefit is limited only by time, effort and capacity. Study the Exposition thoughtfully and you will carry home much which will benefit yourself, your friends and the community.



Tower of Jewels

Standing guard over the Central Court of the Universe is the Tower of Jewels, the most commanding architectural unit in the Panama-Pacific International Exposition. It faces the main entrance to the grounds and rises in successive stages from a square base of 125 feet to a height of 435 feet. Hanging pendent, so that by day they flash back the rays of the sun, and by night the many colored lights that play upon them, are myriads of jewels. While the Tower is a composite in architecture, the



Night Illumination, Tower of Jewels

Roman arch and the Corinthian and Doric columns predominate. The tower loses much in effectiveness in the day. At night, when the searchlights play upon it, all harshness is removed; deep rich color gives place to soft tones and tints in perfect harmony until the tower stands clean-cut and sharp as a cameo against the dark sky and the hills of Marin. Seen from distant points on the grounds, or from the city heights, the view is overpowering.

Tower by Carrare and Hastings, New York.



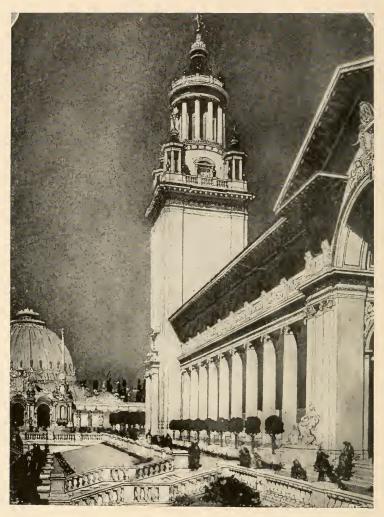
Arch of the Setting Sun, Court of the Universe

The Central Court of the Exposition is the Court of the Universe. It is symbolic of the significance of the Exposition as celebrating the completion of the Panama Canal, and also of the closer unity of all nations and peoples. The entrance on the south is by way of the Tower of Jewels. The Court opens to the Marina on the north, terminating in the Column of Progress. The Arch of the Rising Sun markes the east entrance, that of the Setting Sun (our illustration) the west entrance. The Nations of the East are featured on the former and the Nations of the West on the latter of these arches. These wonderful groups are produced by Messrs. Calder, Sentelli and Roth.



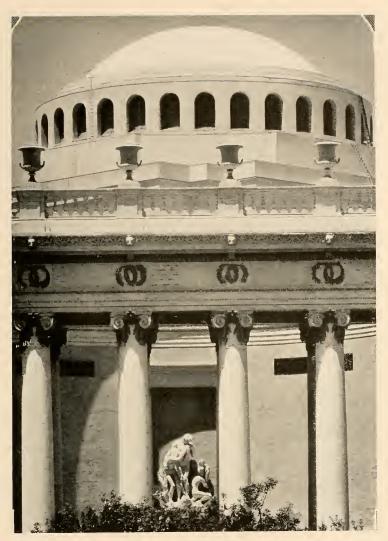
Inside the Court of the Four Seasons

The Court of the Four Seasons, by Henry Bacon of New York, is one of the beauty spots of the Exposition. The center is occupied by a pool, and the Court is edged with greenery. In the four corners are the fountains of Spring, Summer, Autumn and Winter, by Furio Piccirrilli. The seasonal paintings by Milton Bancroft are in the colonnades. Albert Jadger's group of "Harvest" or "Plenty" stands above the great niche, and the Fountain of Ceres by Evelyn Beatrice occupies the front space.



Palace of Education

The Palace of Education topped with its great half-dome, fronts on the Avenue of Palms on the south, and looks out to the west across the lagoon to the Palace of Fine Arts. The north, west, and two south entrances are decorated with appropriate panels, the relief panel of "Education" above the main south entrance and designed by Gustave Gerlach, being most effective. The Palace of Education is the southwest unit of the main group and lies separated from the Palace of Liberal Arts



Great Dome of the Palace of Education

by the Court of Palms. At either side of this Court and standing, one at the corner of the Palace of Education, the other at the corner of the Liberal Arts Palace, are the two Italian towers 210 feet in height. Marking the entrance to the Court is the famous sculpture by James Earl Fraser, "The End of the Trail." The Palace of Education covers nearly five acres and was built at a cost of more than \$300,000.



Looking Across the Fine Arts Lagoon at the Palace of Education

The Fine Arts Lagoon lies between the main exposition on the east and the Palace of Fine Arts on the west. The Palace, in its exterior treatment and the surroundings, is in itself an art exhibit. As one glimpses the structure from a distance, the appearance of age and weathering in its walls, the twining vegetation and the suggestion of open courts and colonnades, reminds one of an ancient ruin or bits of old Kenilworth. The architect is B. R. Maybeck of San Francisco.



Palace of Horticulture

The great glass dome of the Palace of Horticulture is one of the features of the Exposition. In beauty of line and delicacy of proportion, there is nothing to surpass it. The dome stands 182 feet in height, the diameter being 152 feet. Resting upon the dome is a cap or basket 100 feet in circumference. The ornamentation is most effective. At night the dome is lighted by searchlights from the interior, and the wonderful play of color in its graceful movement around the dome is a charming spectacle. Bakewell and Brown, San Francisco, are the architects.



Main North Portal, Palace of Transportation

The main north portal of the Palace of Transportation is in the Plateresque treatment, uniform with that of the north facades of all four palaces fronting on the Esplanade. This building covers seven acres. On the east is the Court of the Ages, on the south the Florentine Court, and on the west the Court of the Universe. The cost of this palace was a half million of dollars.



California Building

Of the several magnificent State Buildings, that of California takes high rank. It is the largest state building ever constructed for an Exposition. Built on the old Spanish Mission style of architecture, it fronts the Marina on the south, with the Bay of San Francisco on the north. In the patio between the wings is a reproduction of the forbidden garden of the Santa Barbara Mission. The architect is Thomas H. F. Burditt.

EDUCATIONAL CONGRESSES AND CONFERENCES

By James A. Barr, Director of Congresses, Panama-Pacific International Exposition



ATIONAL and international congresses on Education, Science, Literature, Industry and Social Service have, since the Paris Exposition of 1889, been a leading feature of all expositions. In their congresses these expositions have had a central theme. The central thought at the Chicago Exposition in its congresses was given expression by the World Parliament of Religions. The central thought of the St. Louis Exposition in its congresses was learning, as exemplified by the World's Congress of Art and Science. The

ten years since the St. Louis Exposition have been years of social, educational, economic and industrial unrest. Communities, states, nations, the world as a whole, have been groping for a solution of problems along such lines. In the sense of meeting with the needs of the world, of giving the greatest possible help to state, national and international organizations, the central thought of the many congresses, conferences and conventions to be held in or near San Francisco in 1915 will be Service,—social, educational and industrial service.

Practically all of the national and international organizations of the world have been invited to hold regular or special meetings or to send delegations to San Francisco to participate in the activities of the Exposition. Up to date, 851 congresses, conferences and conventions have been scheduled to meet in or near San Francisco with specific dates named. The greatest of the groupings, both in number and importance, is that pertaining to Education. A total of 129 educational conferences will be held under the general auspices of the Exposition.

CALIFORNIA'S EDUCATION EXHIBIT-THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION

By W. D. Egilbert, Commissioner-General of California



N this-the world's greatest lesson to the present generation - the Panama-Pacific International Exposition, California endeavored and has succeeded in making an indelible impression upon the world educationally and economically. The result of California's participation in the exposition upon the minds of all who have seen it has been remarkable; the benefits in the years to come will be potential. Not only will this lesson abide with those who are fortunate to receive it first-hand from this city of wonder by the Golden Gate, but the coming generations will reap in no small degree the fruits of this world in epitome.

This lesson taught by the exposition-in which California is a directing factor-will serve to co-ordinate the friendship of nations; concentrate the minds of the general public along lines of uplift; supply to those who are lacking the final touches of a higher education, and will serve to show that man has progressed most through education, and that he will continue to progress only through such measures which tend to build the mind and strengthen the morals-a combination which is the human dynamo that swavs the world.

It is meet that the National Education Association should here convene, and through the world-influence its members exert, carry the ideas and the lesson taught by this, the greatest of all international expositions. First, because the National Education Association is the most fundamentally imporant organization of the entire world, and it is upon the organization as a whole and its members as individuals that the future generations are dependent for much of their future progress, prosperity and happiness.

While California has sought to impress the world visitors with her educational assets, it is no less recognized that exhibits of activities not touching upon education directly, are nevertheless educational. Every exhibit, or display, installed by the State, counties, business concerns or individuals plays its part in this great lesson to humanity.

In installing the educational exhibit in the Palace of Education the executive committee of the State Educational Committee has sought in agreeable and striking manner to show the power of the school system over the child, and the subsequent effect upon the State and Nation. The motion picture theater was recognized by those who designed and installed the exhibit as an exceptional means of portraying to the visitor the public schools of California in action, and at the same time preserving for the future living records of the school system as it existed in 1915.

These films do not contain pictures of school classes in action after long rehearsals, but depict the classes in everyday activity. Pictures are shown indicating from a scientific standpoint how we are teaching the child to be ready to fight the life battles. Illiteracy is being banished in California just as the pictures show the visitor and the student. The schools of this State are in a position to invite healthy criticism, and California regards herself as generally equal and in many points superior in systems, not only in teaching the child, but teaching the parent. Under these present systems, for instance, the teachers go into the home of the illiterate immigrants to teach the English language, sanitation and even domestic science.

In the educational exhibit are featured models of the public school buildings the State University at Berkeley, Leland Stanford, Jr., University at Palo Alto, State normal schools, openair schools, playgrounds, athletic grounds and gymnasiums, as well as structures wherein are taught domestic science and manual training. Art has been featured to a great degree and the exhibit is rife with the products of scholars taught under California's system of domestic science and manual training. Not only are the city and rural public schools shown, but the State schools for the abnormal child and the private school for the atypical child are depicted in film, models and exhibits.

The California building, housing the stupendous diversified displays of the counties of the State, is one of the valuable educational assets of the exposition, elevating and impressive. In this building are shown the educational, agricultural, horticultural and mining products and industrial activities of each county. This phase of California's participation, alone, represents in excess of \$2,000,000, but it is money well spent. Here may be seen the fruits and flowers, minerals, game, woods, still pictures and motion picture films, which make a marked impression on those who view them, and there can be no "back to the soil" movement until the people are prepared for the soil and are taught to take every advantage which Nature offers the human race through the soil. The experience of centurics is here epitomized.

The imprint of the teaching now a part of our great universities is conclusive. In the Palace of Horticulture are fruit products of land farmed scientifically. In the Palace of Agriculture are the agricultural products, which were produced in a like manner. The Palace of Mines contains a wealth of lessons in mining. Not only are the minerals of California in abundance, but there may be seen the practical methods used to gain results. In the Palace of Fine Arts are paintings from the brushes of California artists.

California timber has been featured. The Palace of Agriculture contains many fine wood exhibits, and the beautiful redwood bungalow erected by Mendocino, Humboldt and Sonoma counties in the North Gardens is not only a structure of beauty, but a lesson in itself, as is the California pine bungalow, adjoining. The Palaces of Machinery, Varied Industries, Manufacturers, Liberal Arts, Food Products and Transportation contain California exhibits of much value and interest.

California has paid generous, silent but eloquent tribute in minute detail to education.



Front of the California Booth, Palace of Education, Panama-Pacific International Exposition.

The California Exhibit in the Palace of Education brings out strongly two features: School Architecture and Educational Motion Pictures.

The California Education Committee, realizing the value of a knowledge of school architecture to the teacher and the supervisor, invited the various counties and cities in the State to participate in the exhibit. As a result, there have been submitted photographs of typical school buildings, including rural, elementary and high schools, and institutions of higher learning.

Models and replicas in wood and plaster of kindergartens, open-air schools, and grammar and high school buildings, are on exhibit from various portions of the State. All in all, this is the most typical and comprehensive exhibit, of school architectural features that has ever been brought together.

Several counties and cities have, through motion pictures, featured in whole or in part, activities of their schools. These pictures include buildings and grounds; out-of-door activities, such as athletics, gymnastics and the like; actual classroom processes in book, laboratory, home economics, industrial education and art subjects; agriculture, library work, music, folk dancing and dramatics; and in fact, everything that pertains to education from the kindergarten and playground to college.

Many thousands of dollars have been spent in securing these pictures, and they are shown daily in the California Motion Picture Booth in the Palace of Education. Much of the credit for securing the exhibits from Southern California, is due to Mr. Hugh J. Baldwin. Exhibits from other portions of the State and the installation and arrangement of the collective exhibit, has been in the hands of Miss Ardee Parsons.

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*Deceased.

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EDUCATIONAL SURVEY

Some Suggestive Exhibits at the Panama-Pacific International Exposition

THERE have been several "Surveys" made of educational exhibits at the Exposition, particularly those exhibits housed in the Palace of Education. These surveys or catalogues have all been of distinct service. Helpful, however, as these studies have proved, the approach has, in every instance, been made either from the standpoint of (a) the geography of the building housing the exhibit; that is, taking the buildings as in an itinerary; (b) the location of the exhibit within a given building, or (c) alphabetical as to states or titles of exhibits within a given building.

Generally speaking, the individual is especially interested in some one particular phase of work or educational activity. He must see the most in the shortest possible time. There is also much that is educational in each of the several palaces, and an exhibit installed for purely commercial purposes may have the greatest educational significance. It will be understood, however, that no attempt has been made to include here all exhibits that have educational value.

In the following study the topical method has been followed. The exhibits have been arranged under twenty-six different heads. There are a number of duplications and cross references. When the visitor desires to locate work of a certain character, he can quickly turn to the subject in which he is interested.

Acknowledgment for suggestion is due the Committee of which E. Morris Cox was Chairman, and which made the study for the Bay Section, C. T. A., April last; to the Committee having charge of the study for San Francisco school children; to Dr. M. E. Blanchard for his work; to Superintendent A. C. Barker and others of the Exposition Committee of the N. E. A.; and to Miss Anna Holway of the office of the Chief of the Department of Education for her excellent catalogue.

ARTHUR H. CHAMBERLAIN.

Where street and avenue are given—as for example: B and 5—the exhibit in question is in the Palace of Education, at the intersection of 5th St. and Ave. B; where such designation is not given the palace or building is named. Where a given exhibit is located in the Palace of Agriculture or Palace of Horticulture, for instance, the word Agriculture or Horticulture preceding the name of the exhibit, will indicate the location.

Administration and Supervision

Missouri State Exhibit. 3 bet. A & B. Demonstrating Missouri's decentralized school system and growth of schools since 1894.

N. Y. State University. 3 & B. Centralization of supervision with decentralization of service in a state school system.

Philippine Islands. 1 & A. Collective exhibit illustrative of entire school system; charts, maps, pictures showing organization and conduct of schools; finance, distribution, etc.

U. S. Bureau of Education. 3 & B. Showing organization through charts, pictures, models, publications; school finances, etc.

Agriculture and Horticulture

Agricultural Palace. Exhibit of all phases of agriculture; displays of grains; charts and models; machinery, etc.

Agricultural Palace. U. S. Government. Work of Agricultural Department. Types of work in agriculture, cotton raising and stock raising; protection of national forest—before and after lumbering.

California Building. Exhibit of products from all portions of the state by counties and collectively.

Horticultural Palace. Containing exhibits of fruits, methods of handling, packing, shipping, etc.

Iowa State. 4 & A. Photographs and laboratory equipment illustrating work in agriculture.

Oregon Building. Farm and orchard products fully exhibited.

U. S. Bureau of Education. 3 & B. Work of Agricultural Colleges, Experimental Stations; horticulture, soils, fertilizers, animal husbandry, farm management, forestry, etc.

Utah. 3 & B. Activities of State Agricultural College.

Architecture and Building

California, State. 5 & B. Exhibits of photographs and models of elementary, high and normal schools and colleges. Motion pictures of school architecture and equipment; school activities, class room and out-of-door work, etc. Models of Chico and Santa Barbara Normal Schools; Armijo (Solano Co.), Monrovia and Santa Monica (Los Angeles Co.), San Diego (San Diego Co.), Ceres, Newman and Oakdale (Stanislaus Co.), High Schools; Fresno and Sacramento cities and Stanislaus Co. kindergartens, open-air schools and elementary schools.

Gary, Indiana, Public schools. 4 & B. Model of typical school building and pictures of buildings, showing exteriors and interiors.

Illinois. Models of buildings and school plants, showing types from rural school to State University. Very comprehensive.

New York State. 3 & B. Model of State Educational Building at Albany.

Philippine Islands. 1 & A. Models, plans and pictures of new buildings. Evolution of school buildings during recent years.

U. S. Government. C bet. 3 & 4. Models of school buildings.

Art, Design and Photography

American Crayon Co. 6 & B. A most suggestive exhibit of drawings and sketches made with their crayons and art materials.

Arequipa. 3 & E. Pottery in various forms of display; tiles, vases, etc.

Argentina. 2 & C. Special attention given to art work, and to application of design in construction.

Binney & Smith. Mezzanine, 5. Art materials and designs.

Child Welfare Photographic Exhibit. 6 & D. Children's photographs.

China. 2 & A. Handwork, needlework, clay, tapestry, painting, carving. Superior technique and careful and painstaking work shown throughout.

Fine Applied and Manual Arts. 6 & B. Model rooms planned and executed by individual schools or institutions; furniture and fittings made and placed. Work in wood, metal, textiles, tiles and pottery, painting, etc. Work in fine and applied arts throughout all years of school.

Fine Arts Palace. Paintings, sculpture, textiles, tapestries, jewelry. Special attention should be given the building itself,

the setting and environment of the Palace; the bronzes, both within and outside the building, and the sculptures.

Japan. 2 & D. Specimens of art and handwork; particular attention to color.

Milton Bradley. Mezzanine, 5. Art and color work.

Oregon Building. Drawing and industrial work; the art room is especially attractive, the color scheme excellent.

Philippines. 1 & A. Design applied to textiles, baskets, fabrics, etc.; painting and fine art showing Spanish influence; tapestries and textiles showing influence of the Orient.

Rodman-Wanamaker. 6 & C. Photographs of Indian life.

Utah. 3 & B. Drawing, textiles, metal work.

Varied Industries Building. Commercial exhibits showing application of art and design in the home.

Zone. Creation.

Commercial Education

Palmer Penmanship. Mezzanine Floor, 5 St. A class in penmanship at work, illustrating the Palmer method.

Spencerian Commercial School. Mezzanine-5.

Standard Commercial School. 6 & C. A model commercial school in actual operation, illustrating methods in penmanship, bookkeeping, stenography and typewriting and other commercial subjects; in office practice, filing systems, and so on; fifty students at work daily. Companies participating in this collective exhibit: Gregg Publishing Co. (Gregg System of Shorthand and Rational Typewriting and Office Practice for Stenographers), Linatime Mfg. Co. (Copyright), A. N. Palmer Co. (Penmanship), South West Publishing Co. (20th Century Bookkeeping), C. F. Weber & Co. (School Furniture), Remington Typewriter Co. (Typewriters for Commercial Schools), Yawman & Erbe Mfg. Co. (Filing Equipment).

Consolidation and Centralization of Schools

Illinois. 3 & B. Pictures and models of consolidated rural, grade, and high schools.

Indiana. 4 bet. A & B. Activities of consolidated schools photographs and models.

N. Y. 3 & B. Centralized System. Map showing entire number and location of schools in state.

U. S. Government. 3 & C. Exhibit shows desirability of consolidation of many of our 212,000 one-room schools. Models, charts, designs.

Utah State Exhibit. 3 & B. Designed to show value of consolidated schools through relief map. The possibilities of consolidation clearly demonstrated. Model of consolidated district.

Courses of Study

Argentina. 2 & C. Photographs, charts, drawings, and transparencies of school curricula.

Berkeley High School. 6 & B. Transparencies showing actual school work.

China. 2 & A. Shows the great advance educational movement in China and as well the influence of the older days; technical ability rather than thought processes over emphasized. Lack of correlation and difficulty of work in elementary schools noticeable.

Gary Public Schools. 5 & B. Transparencies showing actual class room activities.

Japan. 2 & D. System of education emphasizing art.

Philippines. 1 & A. Shows relation of text books to laboratory and shop courses and application to the needs of the people. The extension of education into the home.

Utah. 3 & B. Photographs, transparencies and actual work.

Educational Extension

N. W. Harris School Extension. 3 & A. (See museums.)

Philippine Islands. 1 & A. Relation of school to home, especially through industrial processes.

U. S. Government. 3 & C. Shows possibilities of extension work and progress through pictures and charts.

Wisconsin. 5 & A. Library and school extension work shown by pictures and charts.

Defective Children

California School for Deaf and Blind. 5 near A. Methods for teaching deaf and blind; demonstrations.

Massachusetts State Exhibit. 5 & C. Work of Health Department, etc.; charity, blind, insanity.

N. Y. Commission for Blind. 4 bet. C & D. Education and care of blind; the insane, treatment of special classes.

North Dakota. Work done at Institute of Feeble-minded and School of Blind.

Oakland Atypical Children. 4 & C. Showing what the city is doing for its atypical children. Manual training, drawing and sewing emphasized.

Oakland School for Blind. 5 & C.

Sonoma State Home. 5 & C. Demonstrating work done by feeble-minded. Art and textiles.

Mrs. Trask's Lip Reading. 4 near A. Lip reading as method of teaching deaf.

Geography

(a) Clothing.

China. 2 & A. Silk exhibit illustrating various stages of the industry.

Japan Building. Silk exhibit.

Philippine Islands. Fabrics and tapestries.

Varied Industries Building. California Cotton Mills, Oakland. Work of the loom.

(b) Food.

Australian Building. Most complete exhibits of grains, fruits, vegetables, etc.

Canadian Building. Exhibit of grains and fruits.

Food Products. Bees and honey making shown by actual stands of bees at work. (J. C. Frohliger).

Food Products. Model Camp.

Food Products. Model of salmon cannery. Alaska Packers Association.

Food Products. State Fish and Game Commission, and California Academy of Science.

Food Products. U. S. Government exhibit of Fisheries.

Horticulture. Grading and canning of fruit; picking, marketing. Horticulture. Orange Industry. Tangerine growing, picking, boxing, etc.

New Zealand Building. Exhibit of products.

Swedish Building. Exhibit of products.

Washington State. Exhibit of Fisheries.

(c) Transportation. (Unless otherwise indicated, in Transportation Building.)

Demonstration of submarine mine.

Growth of Navy, Merchant Marine.

Map showing highway from Galveston to Winnipeg.

Models showing construction of levee in Mississippi river; also Los Angeles and Galveston Harbors.

Models showing Pacific highway from Seattle to San Diego. Models showing lock and dam, Ohio river.

Models showing relation of San Francisco to Pacific ocean ports.

Models showing highway in Washington State in relation to the Columbia river.

Models of steamships.

Machinery Building. Road-making as carried on in various nations.

Machinery. Tillamuck Lighthouse model, 48,000 C. P.

Mines. Engine on turntable in operation.

Norway Building. Merchant Marine.

Trans-continental journey and fac simile of ticket and cities en route shown by models and miniatures.

(d) Industries, Manners, Customs, Peoples

Food Products. Making of flour. Sperry flour exhibit.

Food Products. Panorama illustrative of tea-growing, picking, etc., in Japan.

Food Products. Salmon Canning Industry.

Food Products. U. S. Fisheries Exhibit.

Liberal Arts. Coffee Industry.

Liberal Arts. Reclamation Service.

Liberal Arts. Study of native life, manners and customs, homes, clothing, industries.

Liberal Arts. Work of the Civil Service.

Massachusetts. 5 & C. Motion picture making of a shoe.

Mines. Exhibit of U. S. Steel Corporation.

Mines. Postoffice in operation.

Philippines. 1 & A. Weaving and basket making by Filipinos. Rodman-Wanamaker. 6 & C. Indian life pictures.

Transportation. Dredger at work.

Transportation. Exhibit showing Railway Mail Service in car. Transportation. Logging and finished timber exhibit.

Transportation. U. S. Government Exhibit. Work of Forestry Department. Photographs and models.

Zone. Tehauntepec (Mexican Village).

(e) Map Study.

Italian Building. Map outside of building.

Mines. Model of the United States.

N. Y. State 3 & B. Relief map of State of New York.

Transportation. Map showing highway from Galveston to Winnipeg.

Transportation. Models showing Pacific Coast Highway Seattle to San Diego.

Transportation. Models showing relation of San Francisco to Pacific ocean ports.

Transportation. Models showing highway in Washington State in relation to Columbia river.

Transportation. Model of Panama Canal.

Transportation. Model of Washington, D. C.

Transportation. Model of New York City and Brooklyn.

Transportation. Trans-continental journey and fac simile of regular ticket and cities en route shown by models and miniatures.

Utah. 3 & B. Physical map of State.

Zone. Panoramic view of Grand Canyon of Arizona.

Zone. Panoramic view of Panama Canal.

Zone. Panoramic view of Yellowstone Park and Old Faithful Geyser in action.

Health and Sanitation

American Medical Assn. 4 near D. Exposure of patent medicine and other "fakes."

American Social Hygiene Assn. 4 & D. Arguments for teaching of social hygiene.

Arequipa Sanatorium. 3 & E. Treatment of tuberculosis. Healthful work in pottery for tubercular wage-earning women.

Baby Hospital of Alameda County. 6 & E. Showing proper care of infants.

California Association for Study of Tuberculosis. 4 & E. Showing prevalency of tuberculosis and facilities for prevention.

Cuba, 2 & C. Pictures and models showing sanitary arrangements and health conditions. Spread of disease and disease prevention. Types of buildings most complete.

Japan. 2 & D. Sanitary work and charts showing effects of anti-tobacco law. Models, and diagrams. Also 3 & E. The Red Cross on battle field and in camp. Hospital equipment.

Joint Board of Sanitary Control. 6 & D. Charts and photographs of child welfare.

Liberal Arts. Sanitation; Disease, prevention and cure; health in the home.

Machinery Hall. Disposal of garbage, city cleaning, etc.

Maryland. 2 & C. Public baths and welfare work.

Massachusetts. 5 & C. Health in relation to civic welfare. Models, charts, maps and hospital work.

Mouth Hygiene Association of America. 4 & E. Demonstration of care of the teeth.

National Consumers' League. 5 & D. Showing unsanitary conditions under which cheap clothing is made.

New York State Department of Labor. C & 4. Factory inspection, child labor, etc.

New York Department for Blind. 4 bet. C & D. Education and care of blind.

New York State Health Department. 2 & D. Models showing longevity, water filteration plant, sewerage disposal, etc.

Pennsylvania State Board of Health. 4 & D. Exhibit of school hygiene and sanitation. Charts, models, transparencies, laboratory equipment, housing, school hygiene, disease prevention. Most complete exhibit.

Philippine Islands. 3 & E. Public Health Department. Progress in health conservation and health since advent of Americans. Excellent models and diagrams.

Race Betterment. 3 & C. Charts, models, electric devices.

Rockefeller Foundation. 3 & D. Demonstration of treatment of hookworm disease; models and charts.

Uruguay Building. School hygiene.

U. S. Children's Brueau. 4 & E. Free examination and clinic for children's diseases. Models and devices illustrating infant mortality, child labor, etc.

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U. S. Department of Labor. 5 & E. Pertaining to infant mortality; playground work and child labor.

Zone. Infant Incubators.

History and Civics

Carnegie Institute of Washington. 4 & C. Exhibits showing work in economics and sociology, etc.

Illinois Building. Lincoln Memorial Hall.

Maryland. Historical pictures.

Massachusetts. Pictures of famous personages and literature descriptive of our country's history.

Washington. Ezra Meeker's history of the Oregon Trail.

Zone. Battle of Gettysburg.

Home Economics

Food Products. Panoramic illustration of tea growing, picking, etc., in Japan.

Food Products. Salmon Canning Industry.

Food Products. Sponge Industry; model and equipment.

Food Products. Sperry Flour Exhibit. The making of flour.

Food Products. U. S. Fisheries Exhibit. Showing various food fishes; the life of the salmon; fishing utensils and tackle; methods of seining, etc.

Liberal Arts. Sickroom and Nursing.

Mines. Manufacture of paint.

Rooms from Louise Brigham's homes. 6 & D. Showing economical and artistic furnishing of homes and use of box furniture. The application of design to construction.

Varied Industries. California Cotton Mills, Oakland. Work of the loom.

Varied Industries. Coffee Industry.

Varied Industries. Exhibit showing application of art and design in home.

Varied Industries. Large department Store.

Varied Industries. Model home showing application of electricity in heating, lighting and labor-saving, and in all departments; laundry, sewing, cooking, etc.

Varied Industries. Singer Sewing Machine Company.

Varied Industries. Work of Sewing Machine.

Washington State. Fisheries industry fully illustrated.

Humane Education

American Humane Education Society, 4 & A. Literature.

Liberty Bell Bird Club. 6 & B. Representing international movement to save the song birds and the insect destroyers.

Stockyards. Exhibit of Society for Prevention of Cruelty to Animals.

Zone. Educated horse Captain Ph. D.

Industrial and Vocational Education

Argentina. 2 & C. Demonstrating Industrial Schools.

Commonwealth of Massachusetts. C bet. 5 & 6. Exhibit centers around vocational and trade industries and shows possibilities of school extension. The use of local materials. Legislation making for establishment of vocational schools. Methods of work. Models, photographs and actual work in textiles, millinery and shop projects.

Hough's American woods. Mezzanine, 5. Books illustrated with actual wood specimens.

Machinery Hall. Construction of a modern safe.

Manual Arts. 6 & B. Showing connection between manual arts and industries, commerce, transportation, recreation, etc. Models made by pupils of San Francisco public schools.

Oregon Building. Showing vocational training.

Philippines. 1 & A. Illustrating how education may determine trade and commerce. The utilization of native materials in the making of furniture, hats, baskets, etc. Work in textiles and at looms.

Republic of China. 2 & A. Showing work in government.

Rooms from Louisc Brigham's homes. (See Home Economics.) Transportation Building. Setting up of a Ford automobile.

Uruguay. 5 & B. The work of school shops and trade schools shown.

U. S. Government. Shows possibilities of marketing.

Varied Industries. Watch making and shoe manufacturing.

Libraries

American Library Association. 3 & A. Location of library stations and work of the Free County Library; means of extension; work with children and foreigners, etc. Charts, pictures and literature.

California Educational Exhibit. 5 & B. Motion picture showing State Library, etc.

Philippines. 1 & A.

St. Louis Public School Association. 3 bet. A & B.

U. S. Government. C bet. 3 & 4.

Wisconsin. 5 & A. Distribution of library service. A model school library. Photographs of rural and high schools.

Mining

Mines. Exhibit of minerals and ores.

Mines. Government exhibit showing exact reproduction underground of coal, gold, copper, silver and other mines.

Mines. Models of mines.

Mines. Panorama of Alaska Mines.

Mines. Panorama of Midway Oil Fields.

Mines. Underground Coal Mine Exhibit. Alaska. Ten cents admission. Showing excellent miniature in cross-section and panoramic view.

Mines. Underground Tourmaline Mine.

Utah. 3 & B. Charts and actual specimens. State School of Mines.

Kindergartens.

Milton Bradley. Mezzanine, 5. Materials, art work, etc.

Moral Education and Citizenship

Anti-Saloon League. 1 & E. Maps, charts. etc., showing health, longevity, heredity, etc., in relation to use of cigarettes and alcoholic beverages.

Prohibition Headquarters. 1 near E. Charts and statements showing effect of liquor traffic.

Religious Organizations. 1 & C. Showing religious and educational work in South and in foreign lands.

W. C. T. U. 3 & D. Place of temperance study in school curriculum. Economic waste in use of alcohol.

Motion Pictures

Motion pictures are to be seen at the following places in the Palace of Education:

California Educational Exhibit. 5 & B. Showing educational activities from kindergarten to college. Counties represented: Alameda, Imperial, Los Angeles, Orange, Marin, San Diego, Santa Clara, Solano. High schools: Monrovia, Santa Monica, Venice. City system: Los Angeles. Private schools: Belmont, Mt. Tamalpais. State High School Cadets. State Library.

Departmental Theater No. 1. 5 near B. Particular attention given to health and travel.

Departmental Theater No. 2. 6 & B. Films showing open-air schools; school museums; Philippine schools; Chicago schools; milk Pasteurization; Pratt Institute; Gary schools; text book making; penmanship, etc. Federal Council of Churches. Travel, tours and missionary work.

Massachusetts Educational Exhibit. 4 & C. The shoe-making industry; activities of the blind, crippled and deformed children; the feeble-minded; inebriates; work in industrial schools for boys and girls.

Indiana. 3 A & B. Consolidated school districts.

New York State Exhibit. 3 & D. Films illustrating health, treatment of insane, scenery and cities of New York State; fire drills in factories and schools, etc.

Rodman-Wanamaker. 6 & C. Indian life pictures.

Wisconsin. 5 & B. Industrial and nature study pictures.

Museums

China. 2 & A. Art materials, historical collection.

N. W. Harris Public School Extension of Field Museum of Natural History. 3 & A. Inaugurated at close of World's Columbian Exposition. Mounted specimens of bird and animal life, minerals, natural history studies, etc. Suggestions for a circulating museum.

St. Louis Educational Museum. 3 & A. Shows possibilities of school museum; nucleus of exhibits shown at St. Louis, 1914. Illustrative materials in geography, history, art, etc.

Uruguay. 5 & B. Collections of industrial and educational value.

Montessori

Montessori. 5 & D. Class beginning August 1st. Lectures and demonstrations by Madame Marie Montessori.

U. S. Department of Labor. 4 & E. Pictures showing Montessori system.

Music

Liberal Arts. Columbia Graphophone Company.

Liberal Arts. Victor Talking Machine Company.

Open-Air Schools

California Exhibit. 5 & B. Open-air schools shown in models and drawings, and motion pictures.

Elizabeth McCormick Memorial Fund. 4 & C. Charts, photographs and models illustrating the value of open-air schools in health preservation. Equipment, plans of buildings, etc.

Printing

China. 2 & A. Block printing.

Ginn & Company. 5 & A. Showing text books in the making; motion pictures, charts, models, etc. Evolution of the book from author to school room.

Machinerv Hall. Printing press in actual operation.

Oregon Building. Showing products of students' printing shop.

Rural School Problems

California exhibit. 5 & B. Models, photographs and motion pictures.

Indiana. 4 & A. Consolidation; photographs of rural school activities.

Oregon. 5 & A. Charts and photographs of rural life; model of rural school; school credits for home work illustrated.

Utah. 3 & B. The rural school and the problem of consolidation.

U. S. Government. 3 & C. Maps, charts and records bearing upon the problem. Evolution of the country school.

Social Hygiene

American Social Hygiene Association. 4 & D. Argument for teaching of social hygiene.

School Systems

Argentina. 2 & C. Shows rapid development. Photographs and charts.

China. 2 & A. Elementary and secondary schools.

Japan. 2 & D. Relation of book work to industrial and art lines; elementary, high and college courses.

Missouri. Type of decentralized school system.

Oregon. 5 & A. System of rural school education.

Philippine Islands. 1 & A. Shows centralized idea upon the one hand with application to local needs upon the other.

Uruguay. 5 & B. Emphasis upon industrial work.

U. S. Bureau of Education. 3 & B. Shows progress of education since St. Louis Exposition. Maps, charts, models, etc. Work of pupils.

Wisconsin. 5 & B. Educational forces of the state. Library work.

THE PANAMA-CALIFORNIA EXPOSITION

By Lewis H. Falk, Director of Publicity

A N all-year visitor to San Diego wrote back East, "The strangest thing here is that electric fans and coal scuttles are passe."

All of which is a reminder that in building an Exposition Beautiful in a land where climate allows the most extraordinary feats of landscape architecture, the Panama-California Exposition at San Diego has not confined its efforts to passing sensation. It has built its exhibits with a view to presenting in striking form the resources of the American West—resources developed to show what has been done; resources undeveloped, to show what remains to be done. This feature, perhaps the most noteworthy from the viewpoint of permanent economic advantage, is set forth, in a way that is destined to appeal with gripping force to banker, to manufacturer, to educator, to settler, and even to the casual tourist. The tourist may come for amusement, but he is going away with an education.

Near the north entrance to the grounds is a large reservation taken by the International Harvester Company. It is an open tract, and here is shown the heavy machinery of the Harvester Company in actual operation. Your Eastern city man may see the tractor and the motor-driven reapers at work. He may see one man and a machine doing in one-half day as much work as kept the old-time farmer and five men busy for an entire week. He may see why the progressive farmer does not live in terror of weather changes. He may see why profits are large and expenses light. His wife, walking through the Home Economy Building, will see that the same mechanical power which saves labor in the meadow also can be put to work in the kitchen and laundry and sewing room to relieve her of the arduous labors she had feared.

Together husband and wife can go to the model small-unit farm, where a model bungalow is set in the center of an intensively cultivated area, where grow fruits and vegetables and cereals and poultry in the narrowest confines. The point is that they can see all this in operation. In a single day, they can observe and study the demonstration of facts that no amount of reading would ever make clear.

On the interior wall of each state building is placed a great

contour map of the entire commonwealth. The visitor shows an interest in a particular exhibit of barley. A guide shows him on the map exactly where that barley was grown. The guide points out the nearest route to market, whether by highway or by railroad. He describes what other crops can be raised with profit in that valley. He locates the nearest water supply, and points out the nearest school and church of the visitor's denomination. In other words, the visitor can stand before that map and learn everything he can wish to know about any and every section of the state.

The delicious fragrance of the big citrus orchard, which is a spectacular exhibit of the Southern counties of California, floods the air. From the open plazas can be seen below the canyons filled with cypress and palm and eucalyptus, beyond the rolling hills and in the distance the snow-capped peaks of California and old Mexico. To the west, lies the Harbor of the Sun, then Coronado and Point Loma, and still further, the blue Pacific. It is a resplendent stage from which to deliver a great message.

Convention bodies from every industry and profession are rallying in force at the Exposition. Since January first, it has housed a veritable pot pourri of personalities, the lay man, the scientist, the scholar, the educator, and continuing on down to, even including the butcher, the baker and candle-stick maker.

The Exposition, while not international in its scope, touches on the foreign countries sufficiently to furnish the visitor with a comprehensive travelogue in a sort of "vest pocket edition." He sees Japan, parts of South America, the Hawaiian village, while before him at every hand in science, literature and art, is exemplified the history and progress of the United States. Diversity of the Exposition is one of its most appealing points.

It has been written that "nothing succeeds like success," and this rather homely phrase is found in a receptive mood at San Diego's Exposition, with its gates thrown open January 1, marking the beginning of the period in which the first all-year exposition in history will be held. The attendance has reached expectations. The million mark in attendance has long been passed, and the record is reaching out toward two million.



The California Building at the Panama-Pacific Exposition, San Diego, facing the Prado on the north, is of the cathedral type of architecture. Surrounded by shrubbery and flowers, it fits admirably into the general building scheme. The Spanish teeling pervades the entire exposition, not alone in the style of buildings, but in the surroundings and atmosphere. The visitor has at once something of the sensation that must have come to those Europeans who first looked in upon us.



The Science and Education Building in Spanish Colonial style is handled after the general type of our "Mission" architecture. Opening onto the Padro, the main street of the Exposition, the effect is imposing. The Spanish Gardens, the sunshine, the suggestion of calm and contentment, and the perfect beauty in color and surrounding, carry us back to the old world and to the early Spanish American days in the Southwest.



The Three Brothers—Yosemite National Park—standing shoulder to shoulder and nodding into the sun-kissed valley and mirrored in the clear waters of the Merced.

-Chamberlain Phote.

Our Western Wonderlands.

By Arthur Henry Chamberlain

THE "See America First" idea had just begun to take hold of the American mind, when the great European conflict was opened. Many who, year by year, have spent their vacation months in Europe or the Orient, turned their thoughts to the "homeland." Thousands of world travelers from the Atlantic side of the continent, but who had never been "West" beyond Pittsburg or Cincinnati, have had visions of the land of the Sundown-sea. Those who do not come this year will journey westward in the months to come.

No other country in the world has so much out-of-door richness as has our Western Wonderlands. The high Sierras with their myriad peaks and glacier covered sides; the Big Trees; the Yosemite National Park; the Coast; the all-year bathing beaches; the wonderful islands of the Pacific,—these offer unparalleled attractions. Lake Tahoe and other mountain lakes in California, with Crater Lake and Lake Chelan in the north, have no counterparts. And Yellowstone National Park and the Grand Canyon of Arizona are reproduced nowhere else in all of Nature's story book.

The following is but a suggestion of the wonders to be found in this land opening outward to the Pacific.

THE YOSEMITE NATIONAL PARK

YING almost due east of San Francisco, a distance of one hundred miles, and in the very heart of the most picturesque portion of the Sierra Nevada System of mountains, is the wonderful Yosemite National Park. It is thirtysix miles from north to south and a half hundred from east to west. The valley proper, and that portion best known to visitors, is some seven miles in length, and from a half mile to a mile in width. This famous valley is a part of that of the Merced River. This river winds its way through the canyon and flows on to join the waters of the San Joaquin.

Yosemite Valley, unlike most canyons cut deeply into the earth, is easily accessible. Through Pullman cars run from San Francisco on both the Southern Pacific and Santa Fe roads, connecting at Merced with the Yosemite Valley Railroad.



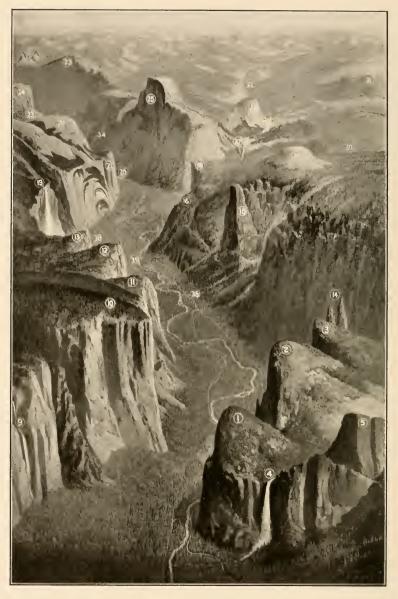
Yosemite National Park—Half Dome on the right, the Royal Arches and North Dome in the center back-ground. From almost any point on the floor of the valley or from the heights, Half Dome reaches up to catch the gaze.

There is also an observation car train, from Merced on the Yosemite Valley Railroad to El Portal. This is a comfortable ride of 78 miles up to the picturesque canyon of the Merced River, and is well worth the trip. At El Portal is a splendid hotel. An auto coach carries you twelve miles into the Valley. As in the old days before the railroad, a stage coach makes daily trips from Raymond on the line of the Southern Pacific. This is a beautiful ride of 65 miles, past the Mariposa Big Trees.

The valley floor lies nearly level on either side of the river, and is covered with grass and flowers of many varieties. Foliage is abundant and groves of trees are everywhere seen. On either side of the valley, the walls rise to a height of 2000 to 3000 feet, in some instances almost perpendicularly. Many of the highest peaks tower 1200 to 1500 feet above these walls.

Of all the national "play grounds" that Uncle Sam has set aside for the use of our people, the Yosemite National Park is perhaps the most varied and interesting. As you stand upon the rim at Inspiration Point and look down into the valley, a view of rare beauty and grandeur is spread out before you. The river finds its course through the center of the valley. Massive domes look down from their summits above the clouds and see themselves reflected in the clear waters of the Merced. Spires and minarets rivaling all the famous cathedrals of Europe and the storied East, stand silently silhouetted against the clear blue of the sky, their tracery as clean cut as if chiseled and carved by the hand of a Phydias. Water falls slide down the sheer faces of cliffs or drop far out beyond the base of the valley wall and break into spray and mist. Far up the valley lies Mirror Lake, and over at the right the Happy Isles.

The most famous dome is El Capitan or "The Captain," rising just on your left to a height of over 3000 feet. On one side it is almost perpendicular. Farther beyond on the same side are the Three Brothers. Cathedral Spires stand across the valley to the right, and beyond them on the same side Glacier Point rises abruptly from the valley floor. From the overhanging rocks on Glacier Point, the cattle grazing in the meadows three-fifths of a mile below, appear no larger than sheep. Still further away, and in the center of the picture is Half Dome, looking as if some giant cleaver had cut its way through the solid wall of rock leaving the flat side to look out and down the valley.



Aeroplane View of Yosemite Valley, Showing Principal Points of Interest.

4—Bridal Vall Falls 10—El Capitan 11—12—13—The Three Brothers 18—Glacier Point 19—Yosemite Falls 20—Royal Arches

25—Half Dome 26—Mirror Lake 27—Vernal Falls 28—Nevada Falls 32—Little Yosenite 33—Clouds Rest The thunder of waters is in your ears as you approach one of the many waterfalls. Yosemite Falls, one of the most renowned falls in the world, leaps over a cliff 2600 feet high. The fall is divided into three parts, the highest of which is nine times the height of Niagara. Bridal Veil Falls, opposite El Capitan, is 900 feet high, and the Nevada and Vernal Falls, reached on the road to Glacier Point, are known for their beauty. As the waters from these falls strike the floor beneath or a projecting rock, they break into spray and there arises a mist painted as if upon a canvas in the most beautiful colors of the rainbow.

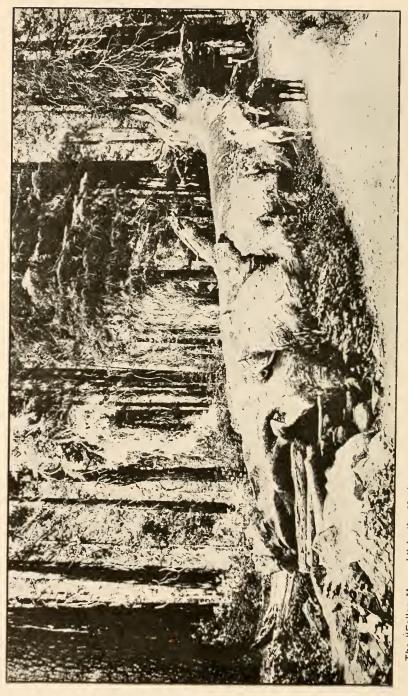
A visit to Mirror Lake in the early morning reveals to you reflection after reflection of the silent mountain peaks that stand guard in the upper valley,—amongst them North Dome and Mt. Watkins. A trip around the valley floor should include the Happy Isles, Tenaya Creek, the Indian Camp, Royal Arches and the Le Conte Memorial, erected in honor of Professor Joseph Le Conte, who did so much to create interest in the valley. There may be accorded those with patience a view of John Muir's cabin hid deep within the foliage near Lost Arrow Trail. And a trip up the trail to Glacier Point, with a stop at Vernal and Nevada Falls, and return by the wonderful balanced Agassiz Rock, will never be forgotten.

There are two groves of Big Trees featured from the Yosemite: the Tuolumne, which requires only three hours' additional time, and the Mariposa Grove, requiring only one day additional time. The trip to both of these groves is made in comfortable automobile stages.

As we leave the valley with regret, we pause once more at the rim to look back upon the beauties spread below and beyond. There winds the turbulent Merced on its way outward to join the San Joaquin. El Capitan raises its towering head majestically to the sky. The falls of the Yosemite seem to beckon us with a myriad silvery fingers. Glacier Point stands a silent sentinel with thousands of years of sunshine upon its head. Where the valley walls seem to meet in the distance, Mirror Lake rests as a diamond in its setting, and away yonder Little Yosemite and the hundred snow-crowned peaks of the Sierras are bidding us Good-bye and Godspeed. As we turn reluctantly away, our only regret is that all the world cannot keep holiday with us in this Nature's masterpiece of the outof-doors.

-Chamberlain Photo.

The "Fallen Monarch" in the Mariposa Grove of Big Trees, prostrate perhaps during the lives of many men, is still sound. The marvelous thing about these trees is their power to resist age and decay



THE BIG TREES

F all the big trees in the world, the largest and most remarkable are the "Big Trees" of California. They are found only on the western slopes of the Sierras. There are more than a dozen of these groves, amongst them the Mariposa, Calaveras and Tuolumne. Those who have not seen these big trees have little idea of their immense size and beauty. No picture or description can begin to do them justice.

The Mariposa is the best known and most easily reached of all the groves. It is accessible from the Yosemite Valley, and a delightful stage ride is offered those who make the valley a starting point for the grove. There is also a stage line between the Mariposa Trees and Raymond.

These trees grow at an altitude of from 3500 to 8000 feet. In some instances, trees may grow many feet or rods apart, and again, several trees may be standing close together. As you approach a group of these trees, you begin to realize you are in the presence of the oldest living things in the world. Thousands of years ago some of them were old. They had been growing for centuries when Christ was upon earth. Yet today they are apparently in their prime. They rise to a height of 250 to 350 feet, many of them standing more than 325 feet high.

The trunks of these forest monarchs are symmetrical in form, and so regular and cylindrical as to cause one to wonder how they could have grown so. In the older and larger trees, the first limbs are frequently seventy-five feet from the ground. These limbs where they branch from the trunk are in some cases as large as the largest trees in the eastern part of our country, and grow almost at right angles to the tree.

If you were to cut one of these trees across the trunk at the foot, you would have a platform upon which you could place a dwelling house of good size. In the Mariposa Grove, the "Grizzly Giant" is 104 feet in circumference at the base. Two or three trees now standing in less accessible groves are close rivals of the Grizzly Giant, but the latter is considered by many to be the largest tree in the world.

The bark of the big trees is very thick, frequently more than three feet. In color there is no other tree with which they may be compared. The color varies from a light golden brown to a mahogany, but whether in the sunshine or in the shadow, there is a sheen of soft mat or velvety finish that makes even the largest tree seem delicate. The proportions are as perfect as a Grecian column and no monument or architectural wonder can rival them in beauty and dignity.

The age of a tree is determined by counting its rings. Each year a ring is added, composed of a growth of dark and a growth of light colored wood. The dark wood is added in the dry season when there is little sap flowing and when the chemical matter is going into the tree. The light wood is added in the rainy or wet season when the sap is flowing freely. The light wood is usually softer than the dark wood. One light and one dark growth form one annual ring. Trees that have been partly burned or have fallen to the ground have been examined and the age can then be estimated.

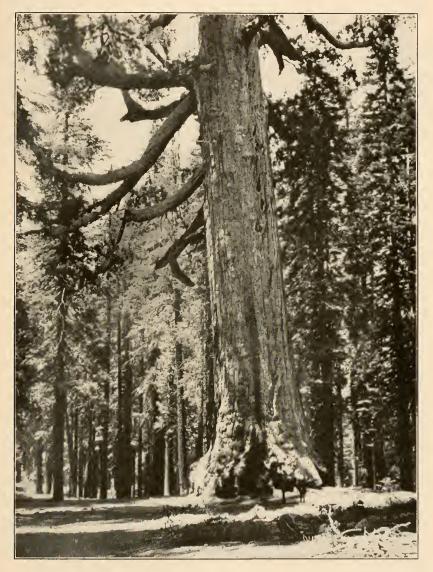
Another wonderful thing about these trees is the fact that burning or cutting does not stop the growth. Whole sections have been taken from the center of the trunk of a mammoth tree, making an opening through which a great stage coach can pass. Such trees are thrifty and still growing.

These big trees are appropriately named Sequoia Gigantea. Our Government has quite properly set these groves apart so that people for all time and from every country can visit and enjoy them.

The Sequoia Gigantea, found only on the western slopes of the Sierra Nevada, and usually at an elevation of a mile or more, must not be confused with the Sequoia Sempervirens, or redwood. The redwood is the tree of commerce and is found in extensive forests on the west or ocean side of the Coast range.

Probably at one time there were many "Big Trees." As the glaciers pushed themselves down they no doubt swept over all but the big trees that now remain, these being protected by the mountains.

The Gigantea is an evergreen. Its cones are small and shapely. The root is slight, and as there is little foliage, it has been thought that the tree secures nourishment from the atmosphere through the bark.



For eight thousand years the "Grizzly Giant" has been lifting aloft his head. He is still young, green and growing amid his companions in the Mariposa Big Tree Grove, California.

-Chamberlain Photo.

Set big and blue and beautiful in the crown of the Sierras, Lake Tahoe with its tree-bordered shores, its cottages and its rugged slopes, offers every inducement to the camper, the tramper and the fisherman. -Chamberlain Photo.



LAKE TAHOE

H ¹GH up in the Sierras, and on the boundary between California and Nevada, is Lake Tahoe. This is one of the most beautiful bodies of water in the world. It lies at an elevation of over 6200 feet. The lake is twenty-three miles long and twelve miles wide. A stone dropped from a boat would fall 1700 feet to the bed of the lake. The water is perfectly clear and of the most intense blue. This is caused by the great depth of the lake and the fact that high mountains completely surround it.

The old overland trail passed through the present town of Truckee. It is only fifteen miles from the railroad station at this place to Lake Tahoe. The railroad from Truckee winds along the Truckee River, famous for its fishing. Yosemite Valley is seventy-five miles to the south of Tahoe and the entire region between is filled with snow-clad mountain peaks, glacial lakes and great forest trees.

Tahoe is set in the center of a wonderful lake region. These smaller bodies of water are all the result of glacial action. A steamer will carry you entirely around the lake, or you may stop at the various hotels and camps that are scattered along the shores. There is boating, bathing, fishing, and, in the mountains that reach down to the waters' edge, there is game of many kinds. Cottages and tents are everywhere seen amidst the trees that grow along the shores of the lake.

Fallen Leaf Lake lies adjoining Lake Tahoe, Washoe Lake is farther away and not far from Carson City, while only a short distance from Truckee is Donner Lake, made famous by the Donner party in their ill-fated venture in the winter of 1847. Emerald Bay stretches its calm waters invitingly inland, and within easy distance of the hotels and camps are many spots interesting to the visitor.

No other lake in the world so easy of access furnishes the attractions that does Lake Tahoe, the "Gem of the Sierras." The ever-changing color of its waters, the charm of its setting, its elevation, depth and size, and the many trails, and snow-clad mountain peaks that rise on every hand, make of Tahoe a region of the rarest beauty.

Chamberlain Photo.

The Grand Canyon, Arizona. From a shelf half-way to the bottom of the great gash from which the eye looks across twelve miles of vacancy, with the rushing Colorado six thousand feet below the rim.—



GRAND CANYON OF ARIZONA

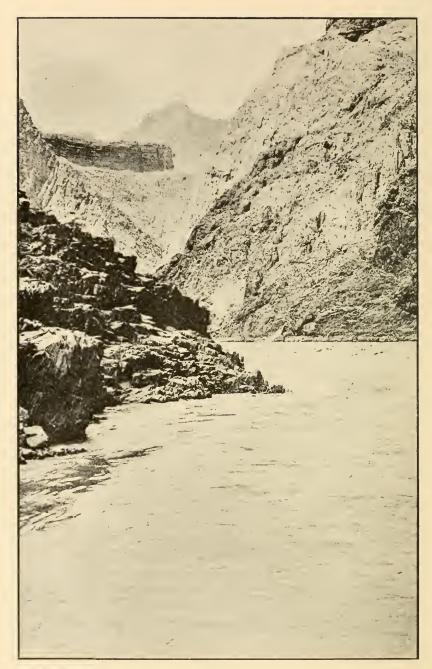
N the southwestern part of the United States and located near the northwest corner of Arite ful gash that we find on the surface of the earth. This is the Grand Canyon of the Colorado River. At the bottom of this canyon the Colorado River dashes and tumbles against the rocks on its way to the Gulf of California. The river is in some places more than a mile below the rim of the canyon, which in its widest part is twelve miles from side to side of the canyon at the top.

As you travel along the Santa Fe Railroad, which runs some seventy-five miles to the south of the canyon, you have no idea of the proximity of this wonderful gorge. A branch railway will carry you from Williams to the very edge of the canyon, where a splendid hotel has been built and where Bright Angel Trail leads to the river below.

From the rim you can look out upon the cliffs, spires and domes upon which Nature has lavished the most beautiful colors. Some sections or strata of the rocks are a bright red, some yellow, some green, and various other brilliant hues. The water and weather have cut the sides of the canyon into weird shapes. There are pinnacles, terraces and promontories. Only an occasional shrub or small tree is seen growing on the immediate rim or canyon side.

As you gaze across twelve miles of space, you find it difficult to realize that this mighty chasm was formed by running water. And there, far below like a silvery ribbon is the turbulent Colorado; so far below is it that no sound of its waters reaches your ears. You may walk along the rim, catching glimpses of an ever changing panorama, or you may take a saddle horse or go on foot to the river below. This trip is perfectly safe, and return to the hotel can be made in one day.

Years ago Major Powell and his Indian guides explored the Colorado River and drifted down through the canyon at great risk. Since then scientists and explorers have visited this marvelous region. The canyon proper seems to be made up of many branch canyons, rolled and tumbled together. The depth, the distance from rim to rim, the coloring, the massiveness and grandeur of this region fill the observer with awe and an overpowering sense of this natural wonder. There is nothing in the



THE GRAND CANYON The Colorado River dashes through the gorge, 6000 feet below the rim —Chamberlain, Photo

CRATER LAKE

HEN our Government finds a natural wonder such as a lake, a forest or a canyon, that is of some special interest, and the like of which there is no where else in the world, it frequently sets it apart as a part of a national park. This it has done in the case of Crater Lake and the country surrounding it. This lake is situated in south central Oregon, at the very summit of the Cascade Range of Mountains. It is nearly circular in shape and about five miles in diameter, and one of the deepest inland bodies of water in the world, being, in its deepest part, almost 2000 feet.

Crater Lake is at an elevation of over 6000 feet. It lies in a kind of cup and is practically surrounded by cliffs that rise from 500 to 2000 feet. Toward one side of the lake, and separated from the mainland by Skell Channel, is Wizard Island. As the water is so deep and the cliffs are so high and unbroken, the water is of an intense blue color, and so clear that if a tin pie plate be dropped into the lake, it can be seen to a tremendous depth as it sinks toward the bottom.

Crater Lake lies in what was once a great active volcano, but which long ago became extinct. During one of Nature's convulsions about fourteen cubic miles of the mountain were engulfed, forming a great bowl-like basin. It is this bowl that holds beautiful Crater Lake. The rim of this old crater commands some of the most picturesque scenery in the mountain country. The lake is easily reached by stage or automobile from Medford, on the Southern Pacific Railway to the west, or one may go in from Klamath Falls on the southeast.

When calm the surface of the lake is a perfect mirror, and so blue is the water that you can imagine it a gigantic tub into which barrels of blueing have been emptied. In a storm the waves beat in fury against the shore. In the winter months the country round about is covered by many feet of snow. In the park are many pines, hemlocks and spruces.

Crater Lake Lodge is a most comfortable home for visitors. Excursions may be made around the lake in row boats or launches and trips along the rim afford ever new mountain scenes. In the center of Wizard Island one may descend about one hundred and fifty feet into the mouth or crater of an extinct volcano. The road from Crater Lake to Ft. Klamath on the south leads along Anna Creek, which with its deep canyons and brilliant colorings is well worth a visit.

YELLOWSTONE NATIONAL PARK

N northwestern Wyoming and reaching over into Montana on the north and Idaho on the west, is a stretch of country nearly square and three times the area of the State of Rhode Island. This is the Yellowstone National Park. The Yellowstone River winds through the center of the region in a general south to north direction. Scattered through the park are springs of hot and cold water, and geysers that throw streams of water many feet into the air. Some of the formations or terraces formed by the sediment in the hot water, are of the most brilliant colors and the sulphur hills and mud volcanos are very wonderful.

The falls of the Yellowstone River are amongst the finest in the world, the Great or Lower Fall being more than three hundred feet high. The deep canyon of the Yellowstone rivals in the brilliancy of its coloring that of any canyon in the world. The Yellowstone Lake towards the southeast portion of the park, is a large, irregularly shaped body of water, at an elevation of more than seven thousand seven hundred feet above the sea. This lake, Yellowstone River and nearly all the streams in the park, abound in many species of trout.

Of the many geysers the most famous is Old Faithful. This sends a stream of water into the air a distance of 125 to 150 feet regularly every sixty-five minutes. The eruption continues for a period of from five to eight minutes. The Riverside, Oblong, Giant, Castle, Grotto and numerous other geysers play at more or less regular intervals.

Animals abound throughout the park. Bears are so tame around the camps that they will take food from the hand. There are mountain sheep, deer, moose, antelope in abundance, elk by the thousand, and more than 200 buffalo, a herd of which may be seen any time at Mammoth Hot Springs. All of the animals are protected. No better example of the work of the beaver in making his house and dam are anywhere to be found than here in the park. Traveling throughout the park is easy, as the ground is relatively level. The Northern Pacific Railway brings one to the northern and original entrance at Gardiner.

It is a strange sight to see these geysers spouting water high into the air. In some instances, as with the Oblong Geysers, or Giantess, the throat or opening is in the form of a circular pool, and when the stream is not being thrown skyward, the surface of the pool is in motion as if some tremendous fire were underneath. The Beehive Geyser is shaped as a cone, or beehive, and the eruptions are from a circular opening in the top. When the water falls back it flows down the side of the cone and as the water cools there is gradually built up what are called formations. These are made by the solid or mineral substances—silica largely—that are held in solution. It is a most wonderful experience to coach for several days through "Geyserland," where one may live comfortably and at moderate expense at the best hotels.



In "Geyserland," Yellowstone National Park. Every seven hours for a period of 15 to 20 minutes Riverside Geyser plays a constant stream of water 100 feet into the air. ---Chamberlain Photo



A. at Salt Lake City, July, 1913, Presented Effectively the Claims of Oakland for 1915 This Special Train Party to the N. E.

EDUCATIONAL OPPORTUNITIES OF OAKLAND

By A. C. Barker, Superintendent of Schools



ROM the standpoint of educational opportunity, Oakland is very fortunately situated. The city contains many church and private schools of recognized merit, of both preparatory and college grade, and Mills College, the most widely known institution in the West devoted exclusively to the higher education of young women. It is within a few minutes' ride of the University of California, and but a short distance from Stanford University. Proximity to these institutions has insured a high standard of excellence in the Oakland Public Schools.

In the City of Oakland during the past ten years, nineteen completely new and modern schools and extended additions to sites and grounds have been provided. The buildings are so constructed that future additions will be easy. All are provided with the latest and best systems of sanitation, heating and ventilation. Nearly all contain, in addition to the regular class rooms, an assembly hall, stereopticon room, neighborhood club room, library, kindergarten, nurses' room with bath, principal's suite, teachers' rest room, teachers' lunch room, children's lunch rooms, boiler and fan rooms, and, in the grammar schools manual training rooms, domestic science and art rooms, and kitchens attached to the teachers' lunch rooms. In all of the new buildings, use of the simplex windows makes it possible to convert each class room practically into an open-air room with the added advantage that temperature, ventilation and light can be regulated to better advantage.

The present school plan includes forty-seven main school buildings, beside portables, shops, etc., twenty of which are of either brick or concrete. The equipment of all the schools is being rapidly improved and modernized. Adjustable scats are replacing the old types of furniture that fit neither the larger nor the smaller pupils of a grade, and as rapidly as possible modern sanitary appliances and provisions for fire protection are being added to the old buildings.

The city has provided for the play and recreation of its children, and for the future expansion of its school buildings. Nearly all of the downtown schools own at least a city block, and many of the newer schools have more. The Lockwood School, for instance, has nearly eighteen acres in connection with the main buildings. The campus of the new Technical High School includes eight acres. Several of the others have grounds nearly as large. This year the grounds of thirty of the schools have been equipped as regular playgrounds under the direction of the Municipal Recreation Department. This equipment includes steel playground and gymnasium apparatus and provision for the various forms of athletics and group games. The consulting landscape architect of the city is providing plans for the ornamentation of these grounds, and the planting of trees, shrubs and lawns is proceeding as rapidly as funds will permit. Of these, ten are particularly well equipped and are kept open after school hours on school days, and all day on Saturdays, on holidays, and during vacations. On each ground at all such times two special instructors, one for boys and one for girls, are employed. The other twenty grounds are kept open as playgrounds after school on school days, and each has a play teacher in charge.

One of the more recent developments of the Oakland system is the expansion of kindergartens. In August, 1912, there were only seven kindergartens; but under the provisions of the new State law, which became effective in 1913, twenty-nine more have been established.

One of the unique features of the Oakland schools is the flexible promotion system, whereby either classes or individuals may be promoted at any time during the year. The records show that many pupils are able to make two, or even more promotions in a single term. Manual training and domestic science and art are given to all pupils of the fifth, sixth, seventh and eighth grades. A great deal of emphasis is placed on music and drawing througbout the schools. An especially noteworthy feature of the high school work in Oakland is the instruction in music. During the past term the music classes have given a series of concerts at the Panama-Pacific International Exposition for the purpose of demonstrating the work in school music as it is conducted in Oakland.

Even in the upper grades of the elementary school these two subjects have a slightly vocational aspect. There are at present thirty-three school bands and thirty school orchestras in the city. Special attention is given to concert work, and steps have already been taken toward community service in the way of public concerts. A great many of the more expensive instruments for these organizations are furnished by the Board of Education.

The health supervision of the schools is entrusted to a director, an assistant director and nine nurses.

There is a psychological clinic or child study laboratory, where children whose mental or nervous condition requires special care are sent. Special classes are maintained for backward children and those needing peculiar individual attention for nervous or mental disorders. Several ungraded classes are also maintained. There are also special classes for immigrants learning English, a class in preparation for citizenship, open-air classes for anemic children, and a class for the deaf.

Worthy of special mention in connection with the elementary schools is a new type of school known as the Vocational High School, which was opened on January 4, 1915. This is a trade school, the purpose of which is to provide preparatory trade and related academic instruction for boys and girls who have the ability and the desire to engage in practical wagecarning occupations, and to continue at the same time a general education, but who feel that they cannot afford the time for a four-year high school course.

The evening schools of the city are open to all young people or adults of Oakland who are desirous of pursuing regular academic branches, or who are interested in some special line of trade or commercial or cultural work. There are several grammar schools, in which a somewhat more flexible course is offered in the seventh and eighth grades than in the regular elementary schools. A pupil may elect, in addition to the prescribed fifteen hours, from ten to fifteen hours of departmental work in drawing, manual training, foreign language or English literature.

The University High School is a small six-year high school, including the last two years of the grammar school course. The chief advantage of the school is that gained from small classes and individual instruction. Each student receives some instruction from an experienced teacher, who is an expert in his line, and he comes into contact with several carefully supervised graduate students from the University, who lend the inspiration and enthusiasm of youth to the daily tasks. It is confidently expected that this school may be looked upon in the near future as a model school, to which both teachers and pupils may turn as a storehouse of the best ideas upon education, and may attain to the standing in the West which the Horace Mann School of Columbia University has long held in the East.

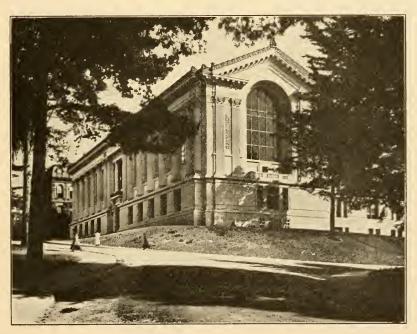
OAKLAND N. E. A. EXECUTIVE COMMITTEE

Owen E. Hotle, Chairman. J. W. Preston, Secretary.

Lewis B. Avery, Hotels.
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Glen C. Barnhart, Printing.
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George W. Frick, Information.
W. D. Forbes, Trains and Transportation.
F. L. Hanna, Excursions.
Dr. A. S. Kelly, Decoration and Badges.
Charles E. Keyes, Halls.
Miss Elizabeth Sherman, Hospitality.
President Benjamin Ide Wheeler, Invitation.

UNIVERSITY OF CALIFORNIA

HILE 5300 students crowd the buildings of the University of California at Berkeley, it is difficult to think that in 1868, when the College of California was first chartered by the State as a public institution, but four or five students constituted the normal enrollment in any one class. Now it is considered surprising if fewer than 1500 freshmen register for an academic year, and it is an ordinary thing to see in the sunny Greek Theater on Commencement Day eight or nine hundred graduates receiving diplomas signifying completion of various courses leading to the 15 degrees now granted by the University of California. Originally founded in Oakland as a private college, the University has flourished since its inception as a public institution in the foothills of Berkeley, until now it stands second in the country in the matter of enrollment, the leading University in this respect being Columbia University in the City of New York. For the year 1915 it is



Library

estimated that 9000 persons will have profited directly by University instruction and 60,000 indirectly through University Extension.

The present campus at Berkeley consists of 270 acres, and it is on this plot of ground that the main departments of instruction are located, as well as the administration of the University. But while this is the seat of learning it must not be forgotten that throughout the State various branches of the University's activities exist—the Lick Observatory at Mount Hamilton, the Sau Francisco Institute of Art, the Hastings College of Law, the College of Medicine, the George Williams Cooper Foundation for Medical Research, the College of Dentistry, the School of Pharmacy and the Museum of Anthropology are all located in the neighboring city of Sau Francisco, twelve miles away across the bay. There is a College of Medicine in Los Angeles, an Agricultural School at Davis, a School of Tropical Agriculture at Riverside, a laboratory at Whittier, the Scripps Institution for Biological Research at La Jolla, and the Herzstein



California Hall.

Library.

Boalt Hall of Law.

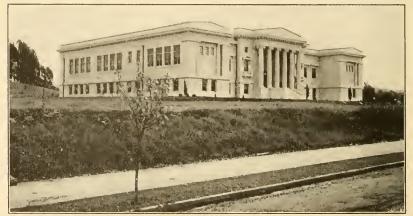
Laboratory at Pacific Grove. There is a Citrus Experiment Station in Meloland, Imperial County; a forest in Tulare County and the great M. Theodore Kearney Estate in Fresno County. These are all branches of the University, and through them the University is able to reach the people of the State effectively and readily, and many of the branches of instruction can be thus given greater specialization, as agriculture and the reseach sciences.

It would be a tiresome thing to recapitulate by name the various departments of instruction in the academic organization at Berkeley. It is far more interesting to turn to the student side of University life and see just of what color and of what spirit it is. Dr. Benjamin Ide Wheeler, who became President of the University of California in 1899, after a succession of distinguished predecessors, granted to the students some years after his inauguration, the priceless privilege of student selfgovernment. This system is now in operation and works with such remarkable success that in his book on "Great American Universities," E. E. Slosson comments on it as being a scheme which actually works in counter-distinction to those written plans of student direction which are ineffective.

While the growth of the University of California in recent years has been nothing short of remarkable, such a growth has sprung from the loyalty and generosity of the people of the State, whose University it is, and who have come with the years to look to it for intellectual guidance and leadership, not only in educational matters, but in all concerns which affect the advancement of the great State of California.







ALAMEDA COUNTY SCHOOLS Typical One-Teacher School. Pleasanton Grammar School. Hayward Union High School.

ALAMEDA COUNTY PUBLIC SCHOOLS

One of the most populous and centrally located counties in the State is Alameda county. Within its confines are several important cities, including those of Oakland, Berkeley and Alameda. Its strategic position at the Bay gives it a peculiar prominence commercially, and the fertility of its soil and congenial climate make agriculture, horticulture and all forms of fruit raising profitable.

As to the quality of its schools, Alameda county has long been known to be in the front rank. The high salaries pail teachers, the generosity of its citizens in providing liberally for the carrying on of schools, and the high professional standard demanded in the teaching body, have advanced Alameda county cducationally.

In the past few years many new buildings have been creeted in the county, both in the cities and the rural districts. The tendency is toward large school grounds and modern buildings.

During the few years past there have been many notable changes in the school system of the county. The course of study has been simplified; examination for graduation from the grammar schools largely eliminated; a system of accrediting schools established, and an opportunity afforded for teaching industrial subjects, such as sewing and cooking for the girls and manual training for the boys. In many districts a course in agriculture is in force. Night schools for adults are being established, thus to meet the popular demand and to complete the educational system.

The rural schools in Alameda county are particularly fortunate in that no pupil is far removed from school, or from high school facilities of the best. Not only in the cities, but in the small towns, the high schools are superior. A system of interurban lines and fine roads and boulevards makes the transportation problem a simple one. Then the large number of institutions of higher learning in the county, including the University of California, give to the students facilities nowhere surpassed.

The County Superintendent of Schools, Mr. George W. Frick, has served for several terms in his county, and knows thoroughly the needs of every community and the adaptability of each teacher to the particular position she occupies. Under his direction the schools are making marked progress.

SAN FRANCISCO

The Financial, Commercial and Industrial Metropolis of the Pacific Coast.

To those who view the wonders of the Exposition and appreciate the magnitude of the task which has resulted in the completion of the "Jewel City"—a city unsurpassed for beauty of color and architecture—there comes no wonder that in the nine years succeeding the disaster which laid it low, San Francisco should have risen to greater prominence than ever among the large cities of the country.

Situated on the deep-water side of the 'largest land-locked harbor in the world, it is the natural distributing center for California and the Pacific Coast. Behind it the great and fertile valleys of Sacramento, San Joaquin, Santa Clara, Sonoma and Napa, the products of which are shipped to all parts of the world from San Francisco. Before it the increasing markets of the Orient and of Central and South America, San Francisco is predestined to commercial supremacy.

The city and county is $46\frac{1}{2}$ square miles in area and its population is conservatively estimated at 528,000. Since 1906 more than \$471,000,000 has been spent in public and private buildings in San Francisco. This exceeds the amount spent on the construction of the Panama Canal. The city's wharves are modern in every respect and equipped with spur track facilities. The exports from San Francisco to foreign ports during 1914 amounted to \$65,979,673 and to Atlantic ports, by sea, during the same year, \$26,559,101.

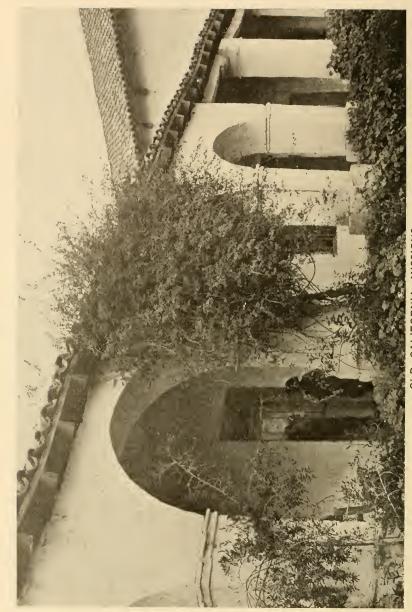
The bank clearings for 1914 were \$2,516,004,816, which was over \$165,000,000 more than the combined bank clearings of the next three largest Pacific Coast cities. Of the eleven principal cities of the country, San Francisco has the lowest percentage of mortgage indebtedness on real estate.

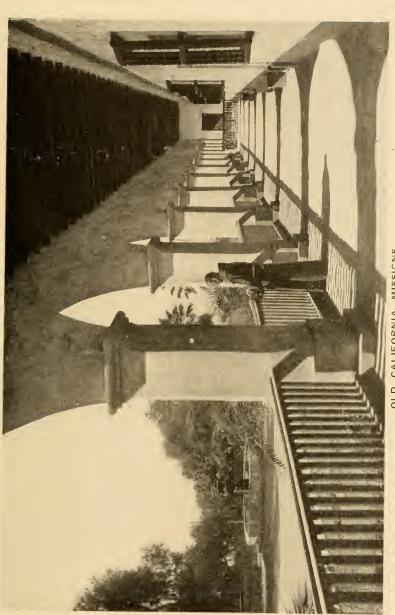
The conflagration of 1906 burned 497 city blocks, or four square miles, in the very heart of the city; 2800 buildings were destroyed in three days. The entire business district was a waste of ashes, yet, without the loss of a day, those who suffered and lost most commenced and carried to completion the rehabilitation of their stricken city. And at the same time they have builded a city within a city—the Exposition City, which represents an investment of \$50,000,000, beginning with a nucleus of \$4,000,000, subscribed by the citizens of San Francisco in two hours at a mass meeting held at the Merchants' Exchange on April 28, 1910.

The Exposition extends two and one-half miles along the southern shore of San Francisco Bay and covers 635 acres. There are three main divisions—the central, containing the exhibit palaces and courts; the western, containing the foreign buildings and live stock section, race track, aviation and athletic fields; the eastern, containing the amusement concessions.



Mission Doloros de San Francisco d'Assisi. Established 1776. The original Mission, the exterior restored, is located at Sixteenth and Dolores streets, San Francisco.





OLD CALIFORNIA MISSICNS Santa Barbara Cloister and Fountain. Founded in 1722

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INTRODUCTION TO PUBLICITY SECTION

Those who have contributed articles to these pages are educators and writers of note; many of them of national and international reputation. Great care has been exercised as well in the selection of those advertisements that appear in the publicity section of the book. Announcements are included of those organizations only for whose reputation the teaching body can stand sponsor.

We call particular attention not alone to the quality of the advertising, but to its appropriateness. Wheher setting forth the value of school supplies and equipment, books, educational institutions, resorts, tours and lines of travel, industrial or social organizations or other factors, the definite relation to the teacher, the pupils, and the general public will be noted.

Not only will these advertisements make their appeal during the period of the convention; the material in many of the writeups and advertisements will be used as the basis for supplementary work in the schools. The great diversity, the quality, and the importance of this advertising justifies us in calling particular attention to the following pages. We request your patronage of these firms and invite you to visit and study the exhibits mentioned.—(Editor.)

"Books that apply the world's knowledge to the world's necds"

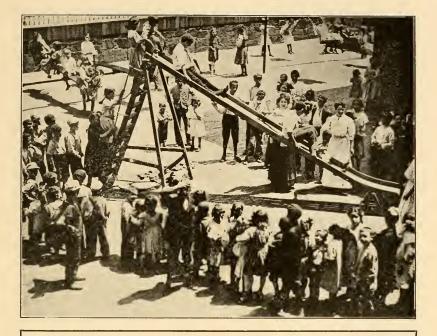
To realize the ideal expressed in the above motto, and to do it artistically, intelligently, truthfully, and fearlessly, is the highest aim a publishing institution can set before itself, and demands the right books and the right men behind them. World Book Company has, since its establishment in 1905, devoted itself with unswerving loyalty to this ideal, and through its corps of educational experts in its studios and laboratories and in the field, is constantly endeavoring to solve the educational textbook problems. Write to this house for information regarding bools which meet the most exacting educational standards as to their value and purpose, their efficiency as textbooks, as well as to their mechanical and artistic features.



WORLD BOOK COMPANY

Established 1905 by Caspar W. Hodgson

YONKERS-ON-HUDSON, NEW YORK CHICAGO ATLANTA DALLAS MANILA



Physical Education An Important Factor

Do not overlook the opportunity to investigate this phase of the modern educational problem. It will be our pleasure to direct or take you around to the various playgrounds, gymnasiums, athletic grounds, etc.

We cordially invite you to make our store your headquarters for general information. You may be interested to know that we carry the largest stock of athletic goods, playground, and gymnasium apparatus west of Chicago. We invite you to inspect our display at

A. G. SPALDING & BROS.

158 GEARY STREET

One-half Block Below Union Square SAN FRANCISCO, CALIFORNIA



San Francisco Headquarters N. E. A.

Ample accommodations provided for members of N. E. A. at the Select Hotel



and affiliated hotels, all of which have been personally inspected and approved.

Every room outside and with private bath

Members are urged to go direct to Hotel Ramona, where they will be assigned to choice outside rooms at prices ranging from 75c to \$2.00 per day.

By doubling up, or going three or four in a room, single and double beds, expenses can be materially reduced.

ELEGANT MEALS

can be had as follows:

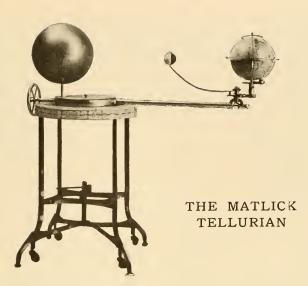
Breakfast, 35 cts. Luncheon, 40 cts. Dinner, 75 cts.

These Rates Special to N. E. A.

Take the Big Blue Bus from Ferry.



Exposition Inn ten minutes' walk from Exposition Under Management Hotel Ramona



The Matlick Tellurian, the most perfect and durably constructed instrument of its kind in the world, is now offered to all schools, being the result of a lifetime of effort and an investment of about \$100,000.

This marvelous instrument simultaneously and correctly reproduces the three motions of the Earth, the revolution of the Moon in its own plane, the gyration of the Moon's nodes, the revolution of its apsides, the sequence of solar and lunal eclipses, all correctly timed with reference to each other; and further, the axis of the earth-globe maintains the constancy of its inclination to the North, and the Moon rotates once on its axis during a revolution about the Earth, keeping always the same face toward the Earth. Thus the demonstration of more than one hundred facts and theories is made possible.

The heads of the departments of mathematics in the universities of Washington, Oregon and California; the superintendents, principals and teachers of the public schools of Seattle, Portland and San Francisco, and a host of other educational authorities agree as to its scientific accuracy and mechanical perfection, and assert it should be placed in every grade and high school.

A requisition has been secured from every school in which it has been demonstrated. Correspondence invited. Send for beautiful illustrated booklet.

Exhibited at the meeting of the N. E. A. in Oakland. Do not fail to witness its demonstration there.

AMERICAN TELLURIAN MFG. CO.,

James Edmunds, Sales Manager. Seattle, Washington.



GOLD MEDAL CRAYONS GIVEN HIGHER HONOR

T HE accompanying illustrations show the Binney & Smith Company's exhibit of their famous Gold Medal Crayons, which have been given still higher honors by the Superior Jury of Awards at the Panama-Pacific International Exposition.

At every Exposition held for many years, Binney & Smith Company have taken the honors, which originated their well-known slogan "Gold Medal Crayons for every use."

Their exhibit is located on the mezzanine floor in the Educational Palace, and was designed by and is under the direction of Bert M. Morris.

The exhibit shows to good advantage this Company's high-grade crayons. The "Crayola" is featured by covering a large panel, four feet wide by twenty-seven feet long, with boxes of these crayons.

The large drawings at the top are made entirely of the colored chalks, and show children in their playrooms, with all other toys thrown aside and drawing with "Crayola," illustrating its preference to any other toys.

Below these panels is a long frieze, two feet wide by twenty-one feet long, made by inlaying different colored chalks in such a manner as to cause a mosaic effect. The design is of conventional butterflies, and is very artistic and well executed. This decoration alone required the efforts of two artists for over three weeks, as every piece of chalk was glued in separately in its proper place.

On the walls below these designs are pictures made with such crayons as "Crayola," "Spectrá," "Boston," "Durel" and other well-known



Crayons, made by this Company, showing the wonderful effects that can be produced with the different crayons, as they make a crayon for every use. Some very beautiful pictures are shown, which were made with the "Spectra," which is the new pastel crayon, and show the same delicate effects as produced by the best imported French pastels.

On the large table in the center is shown the complete assortment of crayons, such as "An-Du-Septic Dustless," "B. & S. School Chalk," "Boston," "Durel," "Crayola" and "Staonal" Crayons.

Artistically displayed will be seen silk sofa pillows, covers, draperies, etc., which have been beautifully stenciled with "Crayola," which shows wonderful possibilities in this direction.

Many artists have visited this exhibit and have been very much surprised and interested in the possibilities of these crayons; which possess the many features of artists' crayons, but which are manufactured at a price within the reach of public schools.

In making the awards, the Superior Jury took all these points into consideration, and decided that Binney & Smith were entitled to a greater honor than the Gold Medal, and awarded them the "Medal of Honor," which is the highest award made on crayons at the Panama-Pacific Exposition, and the highest award **ever made** on **any** crayons at **any exposition**.

Members of the N. E. A. and visiting teachers are cordially invited to inspect this exhibit of **Gold Medal Crayons**, and to see the wonderful possibilities as shown by samples of work.

The official certificate is displayed with their other gold medals at the exhibit in the Educational Palace.





Armijo Union High School

A modern high school building at Fairfield, Solano County, and awarded the

Gold Medal

Awarded by the International Jury in the architectural display, California exhibit, Palace of Education,

Panama-Pacific International Exposition

Medal awarded for beauty, proportion, style of architecture, adaptability to needs of the school, and large returns secured for the money invested.

Visit the California exhibit, Palace of Education, and see this model, and photographs of other school buildings.

HENRY C. SMITH, Architect

Specialist in School Architecture

785 MARKET ST.

SAN FRANCISCO

SIXTEEN YEARS' EXPERIENCE

THE COLUMBIA IN EDUCATION

THE Columbia Graphophone Company's educational records and special school Grafonolas, exhibited in the Liberal Arts Building of the Panama-Pacific Exposition, merit the attention of all who are interested in modern education.



Columbia Exhibit, Panama-Pacific Exposition-Block 18, Liberal Arts Palace

A survey made by leading experts, selected to review the educational exhibits at the Exposition, reveals the fact that the Columbia Company's Educational Department has a most unique and comprehensive list of educational records.

There are records made in all parts of the world, and by nearly all the different peoples of the world.

The list includes records to inspire patriotism and good citizenship, records designed to be used as a disciplinary force, records that are inspirational in characteristics and an unusual list of cultural music records. The use of the Columbia Grafonola in physical education is demonstrated by folk-dance records, aesthetic dance records, gymnastic and special records for playground activities. There are charming story and vocal lesson records and complete singing systems for use in both public school and studio practice; a graded list of vocal and instrumental music for the study of appreciation of music, operatic records and modern language courses. Ear training, through imitation, is the fundamental pedagogic principal or method of using these records to obtain the best results in the spoken work and the use of the pure musical voice.

The musical sense is awakened and the musical memory is developed through repeated hearing of these records of the best in music and the best in literature.



After viewing this exhibit, one comes away feeling the Columbia Educational Department is dealing with specific elementals in a thoroughly practical manner. The cause of education is advanced by this additional material that definitely contributes to the physical, mental and cultural well-being of boys and girls.

The month of August is given over to matters educational at the Columbia exhibit. Daily demonstrations and lectures are given, explaining in detail the methods which the teachers use in their daily work in the schoolroom with Columbia Grafonolas and Educational Records.

A cordial invitation is extended to all teachers and friends, who attend the Panama-Pacific Exposition and the National Education Association's Convention, to visit the Columbia exhibit during the month of August.

> COEUMBIA GRAPHOPHONE COMPANY, Woolworth Building, New York City. (EDUCATIONAL DEPARTMENT.)

THERE is no more picturesque spot in the high Sierras, which is another way of saying in the world, than the Yosemite Valley. Known the world over among those who read or travel, Yosemite is placed at the head of the list of the marvelous wonders of nature. It embodies as does perhaps no other of our national playgrounds, case of access, with beauty and charm and the awe-inspiring grandem of its scenery. The canyon, cut 3,000 feet below the rim; the Merced river winding through; waterfalls half a mile in height; peaks and domes and spires that reach into the clouds; a flower and treecovered valley floor, and trails and drives and camping to the heart's content,—these are some of the wonders of the Yosemite.

290 guests in 1899; 5304 in 1914; 10,000 in 1915—such is the record of CAMP CURRY. Tucked away under the cliff known as Glacier Point, with the entire valley for a front door, Camp Curry is one of the most delightful camps in the world and David A. Curry one of the most efficient managers.



Camp Curry, at the Base of Glacler Point.

The camp embodies all the comforts of a modern hotel, with the joys of out-door life, under the bluest of blue skics by day, and the brightest of bright stars by night. Excellent service is had at the rate of \$2.50 per day, or \$15 per week. The meals at the camp are excellent, the tents are attractive and the appointments are sanitary. There is express, mail and telephone service at the camp, and a postoffice and a money order department, steam laundry, baths and swimming tank. Mail and baggage should be addressed to Camp Curry.

Yosemite and the Curry's make the camp. If anyone has ever been disappointed in the valley or in Camp Curry, we have not heard of it. Genial, courteous, painstaking, David A. Curry is a master of his profession. He is as intimately acquainted with Yosemite and the region round about as you are with your office or school-



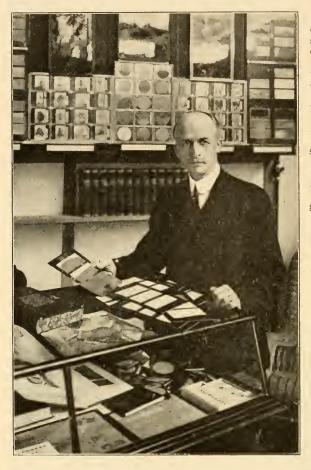
Yosemite Falls, 2600 Feet High.

room, and he can tell you what to see and how to see it.

"All roads lead to Camp Curry." Go to the Yosemite. Stop at the Camp. See David A. Curry and you will go again and take your friends.

UNIQUE EXHIBIT OF AMERICAN WOODS

Palace of Education, Mezzanine Floor, Fifth St. and Ave. A Above Theatre Number 2



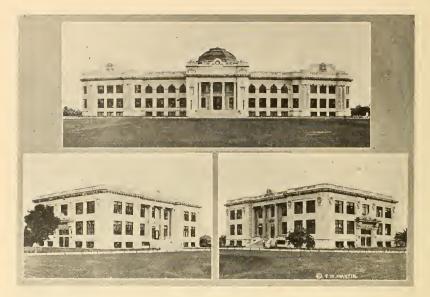
A most interesting and instructive exhibit of American Woods, by Ro-mcyn B. Hough of Lowville, N. Y., consists of a publication illustrated by actual specimens, in the form of sections sufficiently thin to be examined by transmitted light and show the end. radial, and tangential sections of the grain. They are mounted on separate pages to facilitate examination, and beautifully reveal characteristics, structures, etc. An accompanying text with each volume gives complete and full information as to uses, physical properties of each wood, character and distribution of the trees, etc. Twenfive species, three sections of each, constitute a volume, which is bound in a unique and appropriate manner. Thirteen

of the volumes have been issued, covering the woods of the United States; of these, five volumes are woods of the Pacific Slope.

A companion book, **Handbook of Trees** (photo-descriptive) is also shown at the exhibit, in which the leaves, fruit, leafless branches, treetrunk, etc., are photographed in their natural environment. The distribution of each species is plotted on an individual map of the United States, and the photographed microscopic section. A text gives necessary information and a book which appeals to the novice and student alike. Also lantern slides of transverse sections of wood 1.400 of an inch thick, and photo slides of the trees, barks, fruits, etc., and microscopic mounts of wood are shown at this exhibit, besides a novel line of cross-section eards.

YOU ARE CORDIALLY INVITED TO CALL AND SEE THIS EXHIBIT

LASKA UNKNOWN AND OF RARE INTEREST Entertaining Accessible Novel From now on Alaska will be constantly in the public eye. Every educator in the United States should know that land, -should study its great geological and geographical history; its romantic story under primitive Native, Russian and American rule and, above all, learn something of the VERY LOW RATES for excursions to its wonderful fiords, bays, inlets, volcanoes, Indian villages and rich interior. To reach any and all parts of the territory write for full information to JOHN H. BUNCH, General Freight and Passenger Agent Alaska Steamship Company 508 Lowman Building Seattle, Wash. INVITATION TO MEMBERS OF N. E. A. All members of the National Education Association and their friends are cordially invited to use the exhibit of the ALASKA STEAMSHIP COMPANY in the TRANSPOR-TATION BUILDING as their headquarters when at the P.-P. I. E. See splendid maps, charts, and pictures and descriptive matter free. 145



Three of the Group of Seven Buildings Constituting Pasadena Polytechnic High School

PASADENA

America's Beauty Spot—The City that offers every attraction to those who desire a clean, up-to-date, progressive residential city. Its citizenship is of the highest and it is a center of culture and education.

In addition to the excellent public school system, Pasadena has located in it and its environs—Throop College of Technology, Occidental College, Nazarene University, Polytechnic Elementary School, Stickney School of Fine Arts, Eleanor Miller School of Expression and eight other private schools, including three girls' schools and two business colleges.

To those attending the N. E. A. Convention we would suggest that they should by no means fail to see the beauties and attractions of this city.

Sickness or an Accident

Makes the Bank Account Look Sick

Everything going like clock-work—\$20 each month in the bank—it looks like a nice little surplus at the end of the school year. And then something happens, for the best laid plans "gang aft a-gley".

An Accident or a Sickness dips into the program—a month or two is lost, with no salary—it becomes necessary to withdraw from the bank to pay the board, the nurse and the doctor. One month's expenses of this sort, without any income, will play havoc with a nice little savings account.

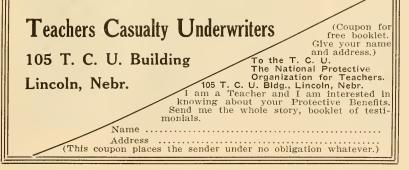
How to Save Your Savings

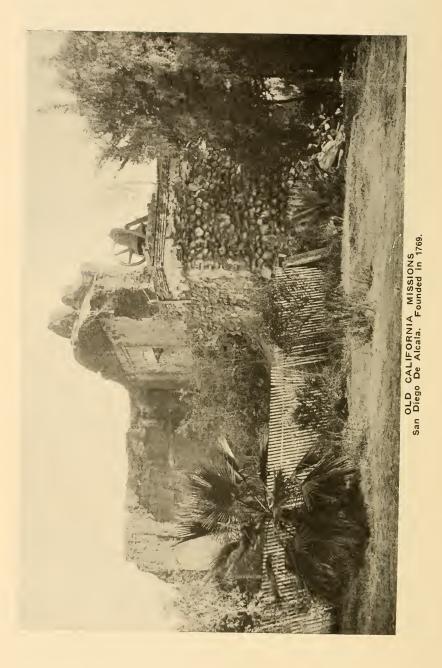
Thousands of teachers have learned by bitter experience that the only way to save their savings is to have them protected by the T. C. U. It is terribly depressing to have the accumulation of perhaps an entire year wiped out in a few weeks by some unforeseen and unpreventable disaster. Many times an accident or a sickness piles up a debt that will mortgage one's efforts for a year or more.

In her own words, read what the T. C. U. cheque did for Miss Bell:

"Permit me to thank you sincerely for the \$227.33 which you paid me for my accident. I fell and broke my ankle on the day after Christmas, and I do not know how I could have kept up my spirits without the knowledge that I would be cared for by the T. C. U. I wish I could talk to all teachers and convince them of the value and necessity of such protection. It took one of your friends a long time to convince me that this was necessary, and now I wonder that I ever hesitated."

necessary, and now I wonder that I ever hesitated." This great National Teachers' Protective Organization—the T. C. U.—stands ready to pay you \$50 a month for loss of time caused by accident, sickness or quarantine, besides many additional benefits, fully explained in our booklet. Will you permit us to send you a free copy? At least read it before you decide what to do. Sign your name and address to the Coupon below and all information will be sent free.







A QUARTER CENTURY OF SERVICE

This year marks the twenty-fifth anniversary of the American Book Company. Founded in 1890, the American Book Company has steadily held to its purpose to publish increasingly better textbooks at the lowest price consistent with form and content of the first quality.

Its catalogue of over three thousand titles registers every significant educational movement. Its aim is to offer promptly the concrete, crystallized expression of the research and methods of the best teachers. Its outlook is wide, embracing every section of the country and instruction of every grade from the primary school to the college.

The American Book Company is conscious of its responsibility to the public generally and to the teachers particularly. It is aware and proud of the contribution it has made to educational progress through the realization of its purpose. And it appreciates, and is encouraged to larger endeavor by the generous recognition of the service it has rendered.

LAKE TAHOE, YOSEMITE AND CRATER LAKE— ON SOUTHERN PACIFIC LINES



Lake Tahoe

ISITORS to the E x p o s i t ions this year will miss a golden opportunity if they fail to see the scenic regions for which the mountainland of the West is celebrated. reached by Southern Pacific Lines. Among these are Lake Tahoe, Yosemite Valley and Crater Lake.

A mile-high lake, twenty-three miles long and thirteen miles wide, its fathomless waters a regal blue, set in a great bowl of rugged snow-clad peaks that rise eleven thousand feet above sea-level-such is Lake Tahoe. About its circling shores there are unfolded panoramas of matchless sublimity, with green meadows and sandy beaches, dense fragrant pine forests that come down to the lake's very brink, rocky cliffs and promontories, and over all the lordly mountains with their crests of glittering snow, towering five thousand feet above the serene face of Tahoe. The lake shore is dotted with summer homes and picturesque resorts, for this is the ideal vacation realm, with nothing to mar the serenity and comfort of its mid-summer weather. The lover of the life-out-of-doors may hunt in the High Sierras, catch royal trout in the lakes and in the Truckee, enjoy the rarest of alpine climbing, ride horseback over safe mountain trails, motor along tree-shaded roads that skirt the waterside, play tennis or partake of any fresh air recreation that heart could wish for.

Lake Tahoe is easily reached—a night's ride from San Francisco—along the line of the Southern Pacific Ogden Route to Truckee, whence the Lake Tahoe Railway runs up the wild canyon of the Truckee River to Tahoe Tavern, 15 miles.

Yosemite Valley

Yosemite Valley stands second to none among the wonders of the world. This famous mountain gorge lies in the very heart of the High Sierras on the headwaters of the Merced River. It is a place of perpendicular percipices, titanic granite spires and domes, tremendous waterfalls and cascades, which give to this loity valley an indescribable grandeur. The Mariposa Grove of Big Trees is reached from Yosemite Valley by stage to Wawona, on the southern boundary of the Park.

Yosemite is most easily reached by the San Joaquin Valley Line of the Southern Pacific to Merced, whence the Yosemite Valley Railroad extends seventy-eight miles up the picturesque canyon of the Merced River to El Portal, at the entrance to the Park. The valley, sixteen miles beyond, is reached after a delightful auto-stage ride. The trip from San Francisco to El Portal takes ten hours. At El Portal there is a fine mountain inn and in Yosemite Valley the visitor is accommodated at wellappointed hotels and camps. The chief features of the valley may be seen in a stopover of twenty-four hours, though it is advisable to spend more if possible in viewing its many attractions.



Crater Lake

Crater Lake

Another remarkable natural feature of the Pacific Coast which should be visited is Crater Lake, lying sixty miles north of the California-Oregon boundary, in the Cascade Range. These mountains were in ancient times the center of immense volcanic activity. The crest of the

loftiest peak of all, Mount Mazama, was "blown off" in some terrific cataclysm of nature and the immense crater filled with water, forming Crater Lake. The lake is six miles across, rimmed by an irregular circle of precipitous cliffs. Crater Lake's waters are of an intense blue, the color given by the great depth, which is over 2,000 feet. The surface of the lake is 6,177 feet above the sea.

Crater Lake is reached from San Francisco over the Shasta Route of the Southern Pacific, by way of Weed, Klamath Falls. and Chiloquin, whence automobile stages run to Crater Lake Lodge, 36 miles. It is also accessible by automobile stage from Medford, Oregon, on the Shasta Route—distance, 85 miles.



"Victor Temple," center of Liberal Arts, P. P. I. E.

Music is the youngest of the arts to be developed into definite form, yet the oldest of all the arts in its service to man in the expression of his emotions of joy, fear, love, hate, worship or play.

All primitive peoples used music, and in much the same form, a simple monotonous chant, accompanied at first by handclapping and rythmic movements of the body, then by crude instruments fashioned out of a hollow log with skin drawn across the opening, and by numerous rattles and jangles of seed pods, gourds, and metals.

Rhythm thus developed, the chanting became more varied and tuneful, and Melody came with the Folk Song and Folk Dance, which at first were the same thing as all songs were danced and all dances were sung. Each Nation evolved a store of particular home, climatic, play, industrial and racial songs. Each used some of the characteristic instruments that were gradually developed from the crude beginnings of horns of animals, reeds, pipes, and stringed gourds, and boxes, and so began the modern instruments of the orchestra. The Crusaders brought back from Oriental lands the Lute and Rebec, and the art of singing songs of love and heroism, with solo accompaniment resulted in the Troubadours, Minstrels, and Minnesingers. All early music was in one part, **Monody**, the earliest combinations being rounds. We have no record of part singing earlier than the Thirteenth Century. The early composers then began to work on the mathematical relations of simultaneous sounds and **Polyphony** and **Harmony** came.

Music as we know it came with the beginning of Opera and Oratorio in the Seventeenth Century, and the great masters of the Eighteenth and Nineteenth Centuries, and is even now undergoing wonderful developments. **Music** in its emotional, imaginative, intellectual and cultured powers, has in it more of value for the education of the whole child than any other single subject in the curriculum of our schools.

Educators have never before been able to bring this force to bear upon the processes of education. "The Victor in the Schools" is the miracle which has made it possible to bring the real music of all the past ages and of all lands to all the children of all the people, and has caused the greatest advancement in Public School music that has come to it since its beginning under Lowell Mason in Boston in 1836.

At the Victor Temple (in the center of the Palace of Liberal Arts) there is given each day a series of educational lectures (illustrated by Victor records) on **Music**, its yesterdays and tomorrows, showing special records which have been made to illustrate all these steps in the growth of music from primitive peoples to the ultra-modern school, all played and sung by the greatest artists the World has ever known, and for the first time made available for the schools as true servants of education.

Victors are installed in the schools of more than 2700 cities, scattered in every part of the United States, and through helpful literature are being used for really educational purposes.

The Victor Temple is conceded to be the most artistic single exhibit on the Exposition Grounds, and has been visited by nearly 400,000 persons since the Opening Day.

Every teacher and educator is cordially invited to come to the Temple and hear the lectures and records of the World's best music. Ask the lecturers and attendants for full information, and for a copy of the Book, "A New Correlation."

For further information address Educational Department, Victor Talking Machine Company, Camden, N. J.

A Clearing House for Home Economics Books

Almost every publisher has some books on the House, its upkeep and decoration; on Sanitation; on Food, Cook-ery, Nutrition; on Hygiene and Nursing.

To save time and money for schools and teachers our firm was established in 1904. One order sent to us brings all publishers' books. Because we specialize only in these lines we can give better service in them to our customers than can be given in these lines by the larger general jobbing houses.

In addition we have published some of the best books on Home Economics now on the market. We invite your attention to the titles listed below.

Are you using these books as texts?

The Modern Household, Talbot & Breckinridge. Household Physics, Alfred M. Butler. Household Textiles, Charlotte M. Gibbs. Selection and Preparation of Food, Bevier & Van Meter. House Sanitation, Marion Talbot. Sanitation in Daily Life, Ellen H. Richards. Home Science Cook Book, Lincoln & Barrows. Cook Book for Nurses, Sarah C. Hill. Equipment for Teaching Domestic Science, Helen Kinne.

Are these books in your school library?

Life of Ellen H. Richards Home Economics Movement Woman Who Spends Fuels of the Household

Euthenics Art of Right Living Home Problems Healthful Farmhouse

We want your orders for books in our lines. We will give you prompt and careful attention. Transportation charges are adjusted to rates from the nearest large booksupplying center. Send for our lists if you are interested.

WHITCOMB & BARROWS

Huntington Chambers **PUBLISHERS**

Boston, Mass.

TOURS FOR THE TOURIST

In Vacation Land. California's popular playgrounds provide every natural attraction

Seashore -- Forest -- Mountain -- River

Superb Climate, the Sportsman's Paradise, Matchless Scenery, easily reached over the lines of the

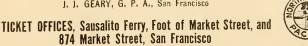
NORTHWESTERN PACIFIC RAILROAD

Hundreds of delightful places for a day, a week or a month's pleasure

- MT. TAMALPAIS & MUIR WOODS.—A journey to a mountain top over a wonderful steam railroad—Muir Woods—a grove of primeval redwoods.
- SAUSALITO FERRY—Boat from San Francisco to Sausalito gives an excellent idea of San Francisco Bay, the islands and the Golden Gate. Time 30 minutes.
- TRIANGLE TRIP-A 150-mile journey along the sea coast and through the giant redwoods beside the Russian River.
- SAN RAFAEL—Delightful ferry trip—a journey by steam train and return via electric over a different route—one hour from S. F.
- PETALUMA—The greatest chicken producing center in California. One and three-quarter hours from San Francisco.
- SANTA ROSA—A thriving city in the midst of a beautiful valley—The home of Luther Burbank and rich in orchards and vineyards—two and a half hours from San Francisco.
- BOYES HOT SPRINGS—A resort of well known excellence, famed for its health-giving hot baths—good accommodations—An hour and a half from San Francisco.
- AGUA CALIENTE—Spanish for "hot water." Nature's healing hot springs-two hours from San Francisco.
- HEALDSBURG—A charming town in a prosperous orchard country three hours from San Francisco.
- RUSSIAN RIVER—Flows through the great redwood groves, and is fascinatingly beautiful; the railway follows it for nearly 100 miles.
- CLOVERDALE—On Russian River, the center of a charming summer home colony, three hours from San Francisco. Stage here for Wendling and Booneville.
- LAKE COUNTY—"The Switzerland of America," includes wonderful mountain scenery, hundreds of mineral springs, good hotels and Clear Lake—largest fresh water lake on the Coast.
- EUREKA AND THE REDWOODS—This company taps the redwood belt of California. On a trip to Eureka over the new line these gigantic trees are passed.

A CONTRACTOR

For free booklets or descriptive matter consult our agents or address J. J. GEARY, G. P. A., San Francisco





Palace of Education, Cor. of Ave. E and 1st Street

Publishing Interests of

Anti-Saloon League of America

Director, Miss Edith M. Wills, Asst. Editor of The Scientific Temperance Journal

Safe and Sane Helps for Progressive Educators

Consisting of

Pictorial Charts, Cartoons, Models, Books, and Special Leetures by Miss Wills, Normal Instructor, all suggesting unique and practical methods of presenting Hygiene and the Nature of Cigarettes and Alcoholic Beverages and their unfavorable effects upon Athletics, Scholarship, Efficiency, Success, Health, Longevity, Heredity, etc.

Special Material for Teachers THE 20th CENTURY KIND

New Scientific Temperance Charts (Athletics, etc.) Handbook of Modern Facts About Alcohol Scientific Temperance Journal Stereopticon Slides Anti-Cigarette Charts You are cordially invited to visit us.

Ask for the Handsome Souvenirs and Helps Reserved for You

EXHIBIT OF THE WOMAN'S CHRISTIAN TEMPER-ANCE UNION-WORLD'S AND NATIONAL



The Study of Temperance the Most Constructive Study in the Public School

BECAUSE the child's own life will be protected and moulded by the truth concerning alcohol.

BECAUSE through the teaching of the child the nature and effect of alcohol, the school will have placed its hand upon nearly every social problem of the nation.

BECAUSE the next generation will be better born as the fathers and mothers better understand the kind of degeneracy caused by drink.

BECAUSE crime and disease will decrease as the light of truth shows one great cause lying at the source of both.

BECAUSE always the greater work is preventive rather than remedial and the problem of how to live aright more important than how to reform.

Along these constructive lines the exhibit has been prepared. The textbooks show exactly the form of instruction used. The essays of the school children give a practical illustration of their understanding of the truth taught.

Among the picture panels illustrating varied phases of the anti-alcohol movement, is one showing that the annual drink bill of the United States is

Six Times the Cost of the Panama Canal.

A feature which instantly focuses the visitor's eye is a cabinet in three sections. One section contains "Alcoholic Beverages," and shows the amount of alcohol found in each. Another is filled with "Temperance Beverages" and visitors are asked to "note the wide variety available." The third section tells "What a Dime Will Buy Measured in Food Values." Conspicuous among the exhibits is the famous Polyglot

Conspicuous among the exhibits is the famous Polyglot Petition, over a mile in length. This document petitions the governments of the world against legalizing the sale of liquor and opium and has been

Circulated in Fifty Nations.

Teachers will gain much from a study of this temperance exhibit, as the facts presented in models, statements, illustrations and comparisons, show graphically how application can be made in the school room.

A FEW OF POMONA, CAL., PUBLIC SCHOOLS



OMONA, California, known as the home of the "Goddess of Fruits," also "The Inland City Beautiful," is in a broad, well watered valley of very fertile soil, on the extreme eastern edge of Los Angeles County.

No community in California is more favorably situated as regards an even climate, picturesque scenery, abundance of irrigation water, pure domestic water, railroad facilities (there being three transcontinental and one interurban electric railways, reaching everywhere), church and school privileges. Population 15,000; elevation 861 feet.

The soil in Pomona Valley is sandy loam; will grow practically everything, and being so very fertile is the surest of all foundations for the future prosperity of the city and valley.

"Pomona College," one of the leading colleges of the West, with an enrollment of more than 450 students, is located at Claremont, four miles N. E. of Pomona.

Pomona has 19 modern school buildings; 96 teachers, 2,800 pupils. The champion High School football team of California.

Some of Pomona Valley products, viz: Orange, \$5,000,000; Lemons, \$1,000,000; English Walnuts, \$360,000; Alfalfa, \$550,-000; Hay and Grain. \$250,000; Poultry Products, \$125,000; Dairy Products, \$350,000; Field Grown Roses, \$150,000; Sugar Beets, \$500,000; Potatoes, \$100,000; Canned Fruit, 3,500 tons.

Immense ice plants, brick yards, foundry, galvanized iron works, planing mills, electric heaters and toasters, citrus fruit by-products. New (1915)-modern fireproof hotel.

The finest streets and boulevards. Ornamental lights. A modern city in every respect. For further information write Pomona Chamber of Commerce, Pomona, Cal.

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Open Air Schools Elizabeth McCormick Memorial Fund
There are 20,000,000 school children in the United States.
They spend 11,415 years in school rooms every school day.
Years of this time are lost and health is demaged, due to the effects of badly ventilated, overheated school rooms.
12,000,000 school children have physical defects which interfere with school progress.
Over 500,000 school children have physical disabilities so serious as to render their school experience practically valueless.
The Open Air School advocates: I. Fresh Air and Hygienic Rights for 100% of the School Children.
II. Medical and Nursing Service Adequate to Conserve and Promote the Health of 100% of the School Children.
III. A Special School Regime Designed to Restore the Debilitated Child to Health and Efficiency.
What shall it profit a child if he gain the whole curriculum and lose his health?

Delegates to the National Education Association are cordially invited to visit the Open Air School Booth at Avenue C and 4th Street, in the Palace of Education and Social Economy—a comprehensive exhibit of the Open Air School movement, prepared by the Elizabeth McCormick Memorial Fund, 315 Plymouth Court, Chicago. In the preparation of this exhibit the Foundation has the co-operation of the U. S. Bureau of Education and many other agencies both in this country and abroad. The exhibit consists of models, photographs, types of equipment, charts, records, forms, plans of buildings and grounds, and other material which it is hoped will be helpful to those interested in the subject.

Delegates are invited not only to visit the booth but to address the office of the Foundation, 315 Plymouth Court, Chicago, for information and literature on the subject.

SINGER SEWING MACHINE EXHIBIT Palace of Varied Industries—Section 7

Every educator should see and study this remarkable exhibit, for it exemplifies ECONOMICS,—industrial and home; PHYS-ICS,—ingenious application of mechanical movements to a great variety of stitching in manufactures; GEOGRAPHY, display, on typical wax figures, of national costumes made on Singer Machines in every quarter of the earth; ART,—repro-



ductions of paintings, also wonderful laces and embroideries all made on the usual type of Singer family sewing machines.

The Singer Company makes four distinct types of two-thread machines for Family sewing, also "The Singer Automatic," a single-thread bobbinless machine.

For manufacturing purposes there are more than Two Hundred distinct types, having more than **One Thousand** variations for special purposes. Forty or fifty of the more interesting are shown here in operation. -Liberal free distribution of literature containing valuable data for teachers.

THE LAW OF HEALTH

EALTH is the most desirable thing in the world. More people can have it than anything in the world. people can have it than anything else. If you are not well it is because there is something wrong with the machinery of your body which ought to be put in order.

There is not a disease or disorder of the body in which the circulation is not interfered with. In health the blood circulates freely to every part of the body. It brings to each cell the particular nourishment that it needs. It carries away all the waste products, and these are eliminated from the body through the proper organs. Thus in health there is perfect circulation of the blood. Perfect circulation of the blood is health.

When there is not free circulation of the blood, disease or derangement has commenced. Nourishment is not brought to all the cells. The waste products are not all carried away; and being retained in the system they become poisonous. Thus interference with the free circulation of the blood means congestion, and eventually inflammation in some part or organ of the body.

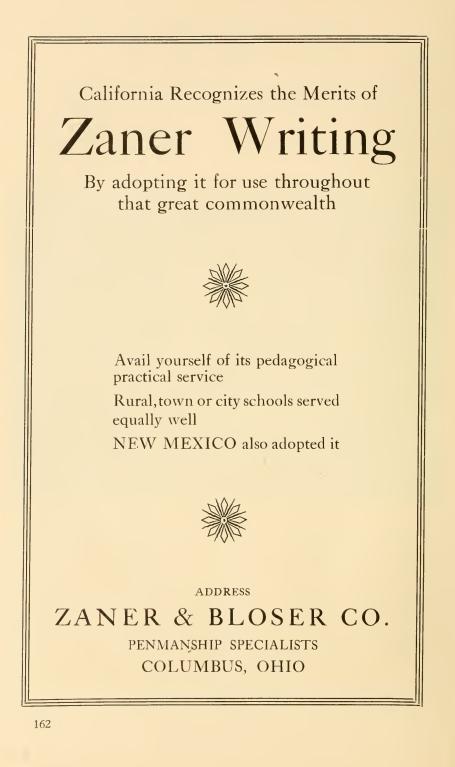
When an organ has become congested and inflamed it is unable to do its work properly. The nerves share in the disorder, and as they control the circulation reflex effects are felt in other parts of the body, sometimes a good ways from the seat of the trouble.

Every disease is not due to a different cause. We name the disease not from the cause, but from the part of the body affected. A great many conditions which we give other names to are really colds. They are all due to disturbances of the circulation in the parts affected.

There are a whole list of digestive troubles which are really due to a bad circulation, and congestion somewhere in the digestive organs. The nourishing of the body is not going on well. Deterioration and disorder of the circulation are responsible for a whole brood of nervous diseases. Women are subject to derangements of the circulation, giving rise to many serious and painful conditions. In children, colds and catarrhal conditions develop adenoids, and earache and croupy conditions.

The real trouble in all these conditions is in the interference with the free, regular circulation of the blood. The cure lies in getting at the cause,---the deranged circulation and loss of tone in the nerves controlling it.

-From, The Law of Health, Copyrighted and Published by The Viavi Company, San Francisco.



A DELIGHTFUL TRIP

One of the scenic rides that each teacher should take before leaving Oakland is to

Mills College

This College for Women is ideally situated in the rolling hills of East Oakland, about one-half hour's ride from the center of the city, and is reached by the Mills College car. It is one of the oldest educational institutions in the State and its patrons are among the most prominent people. Its campus is one of the most beautiful in the land.

The entrance requirements to Mills College are equivalent to those of the State University and Stanford University. Graduates of the College do creditable post-graduate work at the different universities, and in some cases take their second degree in one year after graduation.

The so-called standard departments are strong. Public playgrounds call for trained overseers, and this line of work is represented by a well equipped department of Physical Education. The demand for well trained women in Home Economics is met by a strong department in this popular field of work. Special attention is given to the health and care of the students.

Mills College aims to equip young women for efficient, cooperative, unselfish service in the home and in the world.

During the Exposition the College is maintaining a headquarters at the Inside Inn. Visitors are most welcome at the Mills Alumnae Room in this building.

But better than this, why not come out to the real headquarters and see the College itself before you leave Oakland?





CALIFORNIA'S PETROLEUM INDUSTRY



A "Section 36" Gusher

By Alfred Galpin

S TANDARD Oil Company (California) estimates that this state is now contributing about two-fifths of the petroleum production of the United States, and more than one-fourth of the entire world's output. Its estimate is based largely on figures compiled by the U. S. Geological Survey, Department of the Interior.

What California (as a factor in the petroleum trade) most lacked when the Standard Oil Company began its big campaign of industrial activity in 1900 were refineries, pipe-lines, storage facilities, tank steamships—in brief, the equipment necessary to operation and consequent development of the industry. Furthermore, it lacked—and it needed the organization necessary to the building up and supplying of the markets.

This company has built refineries—at Richmond, Cal., where it has one of the most complete refining plants in the world; at El Segundo, in the southern part of the state; and at Bakersfield, approximately speaking in the heart of the oil-producing territory. It has constructed 425 miles of pipe-lines, carriers of the crude product to the refineries, and it has assembled a fleet of 27 oil-carrying craft, the most recent addition being the "J. A. Moffett," built in San Francisco, one of the finest and largest oil-carriers afloat. In these vessels, and in those of its customers, Standard products go to all parts of the world.

Production alone has never made an industry; this company's distributing facilities are one of its chief contributions to California's petroleum success. To meet the demands of the consumer it has established a circuit of 250 stations, extending



PIPE LINE PUMPING STATION, CORCORAN, CAL.



STANDARD OIL COMPANY REFINERY, RICHMOND, CAL.

from Alaska to San Diego, Cal.; in the north as far east as Spokane, Wash.; in the south to Phoenix, Ariz., and to the west in the Hawaiian Islands. Motor tank trucks and tank wagons operated out of these stations supply Standard products to customers in their respective fields. This service is augmented by the many Standard Service stations where motorists are supplied with gasoline and motor oil.

As to petroleum products, California today occupies a position which she can point to with pride, and her standing in this regard is directly due to this same efficient organization, the Standard Oil Company: this company, besides receiving the Grand Prize for its *"General Exhibit of Petroleum and Its Uses," at the Panama-Pacific International Exposition, was awarded gold medals on practically all of its products; the exceptions being those for which, there being no competition, a silver medal was the highest award. It was a competition from which no one was barred; it was open to the world. And it resulted in a sweeping victory for the California company, for a California industry, and for California oil. It is an acknowledgment that the Standard Oil Company can make kerosene, gasoline and lubricating oils out of California crude superior to similar products made elsewhere out of other crudes.

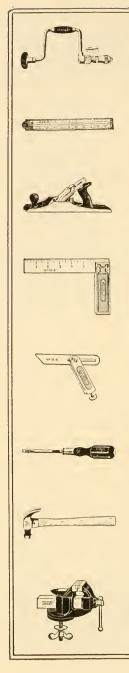
For refining purposes this company buys much crude oil from the small producers operating in the California fields, but it is itself a producer, and through its efforts has been opened up some of the State's best oil territory, notably "Section 36" in the Midway Field. Here it expended over a million dollars before the property was on a paying basis, though finally its efforts were rewarded by several wells that have made petroleum history.

Including its sales force, refinery operators, and oil-field mechanics, this Company employs between six and seven thousand men.

*N. E. A. Members Cordially invited to inspect this Exhibit.



S. O. C. TANK STEAMER IN PUGET SOUND, WASH.







The illustrations on this page suggest, in a limited way, the extent and diversity of the STANLEY line.

Their use in the Schools throughout the United States is constantly increasing.

In addition to hundreds of tools of standard design, we manufacture a great number of novel and special purpose tools, combinations, etc., that will appeal strongly to those interested in Manual Training Equipment.

In our Sales Organization we have a special department devoted exclusively to Manual Training and Vocational School work and solicit correspondence, wherever tool equipment is under consideration.

Our catalogue No. 34, contains 148 pages of interesting tool information. May we send you a copy?











N. E. A. VISITORS Are Cordially Invited to Visit the Exhibit of G. & C. MERRIAM CO.

PALACE OF LIBERAL ARTS, SECOND ST. AND D. AVE. PANAMA-PACIFIC EXPOSITION



Educators will find much of interest in the collection of former editions of this world authority, showing a copy of each edition from 1806 to the present time. This is a marvelous evolution from the small book of 1806, which was Webster's first attempt, followed by the larger two-volume edition of 1828. This was followed by an edition in 1841. Then came the edition of

1847. This was the first edition published by the G. & C. Merriam Co. after they purchased the rights from the Webster Heirs. The edition of 1859 was the first American Dictionary to make use of illustrations. This was followed by the edition of 1864, and in the edition of 1884, the now well-known and deservedly popular geographical gazetteer, was added.

In 1890 Webster's International Dictionary was published, and a supplement giving 25,000 new words added in the edition of 1900. In 1909 was issued the Webster's New International, with Dr. William T. Harris as editor-in-chief, assisted by a very capable corps of editors. In 1913 the United States Census Statistics were available, and the gazetteer was thoroughly revised and brought to date. In 1914, the many new words which have found their way into our language were added and fully defined.

The International Jury of Awards, Panama-Pacific Exposition, at San Francisco, have just awarded the Merriam-Webster Series of Dictionaries Grand Prize (highest award) for Superiority of Educational Merit. Medal of Honor for Printing and Binding. Two Gold Medals for Editorial Superiority.

KEY TROLLEY TRIP

Leaves Ferry Building, San Francisco: 10:00 a.m. and 1:00 p.m. Leaves 12th and Broadway. Oakland: 10:00 a.m. Leaves Key Route Inn, Oakland: 1:35 p.m. Round Trip Fare: \$1.00.

Leaves Key Houte Inn, Oakland: 1:35 p. m. Round Trlp Fare: \$1.00. The famous "Personally Conducted" trlp by Steamer and Special Obser-vation Car, seeing Oakland, Berkeley, Alameda, University of California, Greek Theater, Havens Art Gallery (\$1,000,000 private collection), Piedmont, Clare-mont, and all points of interest in trans-bay cities. Sixty-eight mile tour for One Dollar. The favorite local trip.

SEEING SAN FRANCISCO AUTO TRIP

Leaves No. 6 Powell street at 10:00 a. m. and 2:00 p. m. Cars call at hotels for passengers. Oakland passengers met at Ferry Building. Round Trip Fare: \$1.00. A 2½ hour tour by new 1915 mouel signt-seeing auto, covering all points of interest in the city—Downtown District, Civic Center, Golden Gate Park, Cliff House, Seal Rocks, Sutro Heights, Presidio Military Reservation, Forts and Fortifications, Birds-Eye View of Exposition and great San Francisco Bay. Every interesting point seen on this Big Double Trip.



Mount Hamilton-Observatory.

EXPOSITION ILLUMINATIONS AND CHINATOWN TRIP

Leaves No. 6 Powell street at 8:00 p. m.

Cars call at hotels for passengers. Oakland passengers met at Ferry Building. Round Trip Fare: \$1.00. A three-hour evening tour by sight-seeing auto. Viewing the Exposition Illuminations and Fireworks from top of Filimore Hill—the most spectacular sight connected with the Exposition. Through tour of famous San Francisco Chinatown under charge of experienced, licensed guide. A refined, instructive and intensely interesting trip.

BAY EXCURSIONS

Leaves Wharf at 10:00 a. m. and 2:00 p. m. for daytime cruises. Round Trip Fare: \$1.00 for daytime cruises. A three-hour cruise around the great Bay of San Francisco on new, double-decked, sight-seeing excursion steamers, built expressly for pleasure and sight-seeing parties. Viewing 1,000 miles of shore line dotted with cities and towns; Embarcadero, Dry Docks, Battleships, Yerba Buena Island, Alcatraz Prison Island, Winehaven, Angel Island, Presidio, Golden Gate, Exposition, Fortifica-tions. Land at Exposition, If desired.

OAKLAND SIGHT SEEING AUTO TRIP

Leaves No. 6 Powell street at 1:30. Return, 6:00 p.m. Cars call at hotels for passengers, 1:15 to 1:30 p.m. Round Trip Fare: \$1.50. By Auto all the way. Seeing Oakland and Berkeley. Covers all points of Interest, Including University, Greek Theater, Piedmont, Art Gallery, Highland

168

Drive. Passengers called for and discharged at hotel by auto. Auto and party cross by ferry. Lecturer accompanies each party. Fare includes all expenses.

MT. TAMALPAIS AND MUIR WOODS TRIP

Leaves Ferry at 9:15 a. m., 10:45 a. m., 11:45 a. m., 1:45 p. m., Bound Trip Fares: \$1.90 for either; \$2.90 for both. Most wonderful mountain railway trip, via the crookedest railroad in the world. Panoramic view of Bay Region from mountain top. Muir Woods is the only forest of "Big Trees" near this city. This is an all-day trip and should be taken by starting in the forenoon.

PALO ALTO AND STANFORD UNIVERSITY

Seven-Passenger Automobile Trip Leaves No. 6 Powell street at 9:00 a. m. to 2:00 p. m., on even hour. Cars call at hotels for passengers. Round Trip Fare: \$2.00. Delightful 70-mile tour by seven-passenger automobile through the most beautiful section of California—the country homes of San Francisco million-aires: Burlingame, San Mateo, Redwood City, to Palo Alto, the home of Stanford University. A five-hour trip.



Stanford University.

SAN JOSE AND SANTA CLARA VALLEY

SAN JOSE AND SANIA CLARA VALLEY Seven-Passenger Automobile Trip Leaves No. 6 Poweli street at 9:00 a. m. to 2:00 p. m., on even hour. Cars call at hotels for passengers. Round Trip Fare: \$3.00. This is a 110-mile tour by seven-passenger automobile, traversing all covered by the Palo Alto trip and continuing through beautiful Santa Clara Valley to San Jose. The roads are the best in the world; the splendor of landscape unequalled; the richness of environment unsurpassed. This is a seven-hour trip.

SPECIAL "ALL-EXPENSE" TOURS

MT. HAMILTON AND LICK OBSERVATORY—By seven-passenger auto-mobile, leaving No. 6 Powell street at 1:00 p. m. the first day and returning at 12:00 m. the second day. All expenses, \$12:50. YOSEMITE VALLEY—3, 4, 5, or more days' trip. All expenses included in ticket. Prices on application. PRIVATE AUTOMOBILES, STEAMERS, LAUNCHES, SIGHT-SEEING AUTOS, TROLLEY CARS, etc., furnished for private parties. Party rates allowed on all trips and tours. Prices on application to

GOLDEN WEST TOURS, INC.

TICKET OFFICES AND INFORMATION BUREAUS

IN OAKLAND: At Kahn's, 16th and Broadway, Phone Lakeside 1. IN SAN FRANCISCO: 6 Powell St., Near Market, and 854 Phelan Building, Phone Sutter 3350.

"Where is the man who can live without dining"

Colonial Cafeterias

422-428 Thirteenth St. 413-417 Thirteenth St.

Bet. Broadway and Franklin Oakland, Cal.

The Oakland Bank of Savings

The Oldest and Largest Bank in Alameda County

RESOURCES OVER \$27,000,000.00

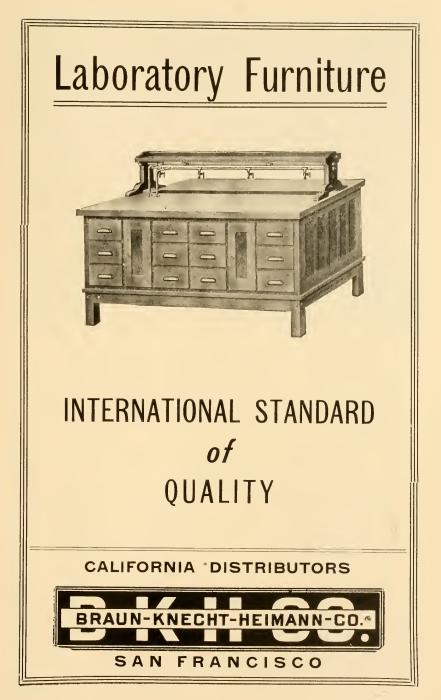
Savings, Commercial and Trust Safe Deposit Vaults

4 Per Cent Interest Paid on Savings Accounts.

N. E. Corner Twelfth and Broadway, Oakland

Oakland Branch: 1240 Seventh Street

Berkeley Branch: Shattuck Ave. and Center St.







Going to School at the Panama-Pacific International Exposition.

VITALIZING AN EDUCATIONAL EXHIBIT

Interesting Facts About the Standard Commercial School Exhibit, Palace of Education, Panama-Pacific Exposition

Forty students taking regular commercial course. March 29 to September 20. Selection based on examination in English, arithmetic, and personality.

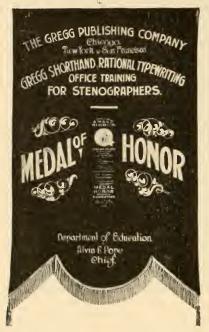
Tuition, supplies, and admission to Fair free by courtesy of Exposition officials and Companies participating in Exhibit.

Classes in session every day except Sunday. Hours 10 to 4. Special demonstrations every afternoon. Course includes Gregg Shorthand, Rational Typewriting, Palmer Penmanship, 20th Century Bookkeeping, Office Training for Stenographers, Public Speaking, Business Correspondence, and Commercial Law.

Remington Typewriters, Y. & E. filing equipment, and C. F. Weber Co. school furniture used exclusively.

Monday, August 30, is "Standard Commercial School Day" at the Exposition. Members of the N. E. A. are cordially invited to visit the school and attend the Commencement Exercises, which will be held at 4 p. m. in the Court of Abundance, P.-P. I. E., August 30, 1915.

GREGG AND GROWTH



Fifteen years ago Gregg Shorthand was taught in less than 200 schools in the United States. Today it has passed the 3000 mark. It will continue to grow because it has the essentials of growth. At the Standard Commercial School Exhibit, Palace of Education, forty boys and girls are every day demonstrating to thousands the three fundamental features—Accuracy, Legibility, Speed.

Today over 1250 cities are teaching Gregg Shorthand, and they are all progressive cities. In 1914 alone over 400 schools adopted Gregg, among them the leading high schools and colleges in the country. In New York City the Board of Education has adopted Gregg Shorthand for a period of five

years. And early this summer the City of Oakland, California, adopted Gregg Shorthand exclusively for four years.

The fifty or more institutions of higher learning using Gregg Shorthand include Columbia University, University of California, Syracuse University, University of Virginia and Simmons' College of Boston, Mass. And among the leading cities teaching Gregg Shorthand are New York, Seattle, Boston, Oakland, Rochester, Denver, St. Paul, Kansas City, and Indianapolis. It would take at least four pages of this type to give all the cities that are now using Gregg Shorthand, and it would take about the same space to give the names of schools that have changed to Gregg after having tried the other systems of shorthand.

THE RATIONAL IDEA IN TYPEWRITING

What the Gregg Manual has brought about in the shorthand world, Rational Typewriting has accomplished in the realm of typewriting. The fifty-word-a-minute records of students at the Exposition school and the phenomenal speed records of Blaisdell and Trefzger, demonstrating at the Underwood booth in the Liberal Arts Palace—are both effects of the same cause— Rational Typewriting.

The command of the entire keyboard comes by easy stages. The system does away with discouragement; instead it gives the student, especially the beginner, a feeling of gradual conquest over the technical difficulties. Throughout the course the student feels he is "getting there."

Rational Typewriting is used approximately in half of all the schools of the country in which typewriting is taught, including most of the leading business colleges, and many of the high schools of large cities.

OFFICE TRAINING FOR STENOGRAPHERS

This valuable textbook is second only to actual business experience. It "eliminates the beginner," as one student has aptly put it, by making the office training an integral part of the regular course of study. Every important phase of actual business is treated in a most interesting way with the aid of artistic colored illustrations of office appliances and equipment. Mr. Rupert P. SoRelle, the author, creates a business atmosphere in the classroom that makes for highly efficient work. One cannot read this admirable text without recognizing its vast superiority over any similar publication. The twelve sections include everything from the Letter of Application, and Letter Filing to Meeting Callers and Editing Dictated Matter. The last section is a comprehensive summary—A Day's Work—Being the Co-ordination of the Work of Previous Days Into an Organized Whole.



Teachers of Gregg Shorthand at University of California during Summer Session

THE NEED OF PENMANSHIP REFORMATION By A. N. Palmer



Mr. Palmer complimenting the muscular movement writing of a secondgrade pupil in the Palmer Method School and exhibit room over moving picture booth No. 2, in the Palace of Education of the Panama-Pacific Exposition.

More than a million little children with impaired eyesight and twisted spines are offered today as silent evidence that some one blundered in the methods of teaching penmanship a few years ago,—a million monuments to the manner in which we did not teach properly.

One-half of the time now given to written tasks might be saved to be given to other urgent duties.

Ninety per cent of the errors now caused by illegible writing might be avoided by teaching muscular movement writing during the child's first years in school, and yet some teachers cannot see that the proper teaching of writing is the most important duty she has to perform. Many little children are allowed to suspend their arms above the desks and make large characters during their first year or two in school—not only allowed but required to do so, only to be told later on that they must not do so. Think of it! The average pupil in the schools of the United States does not reach the sixth grade, and yet we waste one, two or even three years of his training in improper methods of teaching writing. Is it a wonder that our writing is the basis of unlimited reproach?

There is no longer the least reason why any normal boy or girl should leave our schools unable to write a rapid legible style of business penmanship. Not only is this true, but when

(Note: When the International Jury of Awards met they awarded Mr. Palmer a medal of honor as a collaborator in educational reform.)

we as school men fail to develop a child in this most essential subject, we start that child in life with a handicap as serious as if we failed to develop proper speech.

Only a few years ago writing was looked upon as a nonessential, so much so that it was dropped from the normal schools of almost every state in the Union. The result has been a generation of teachers unable to write, and naturally unable to teach children to write.

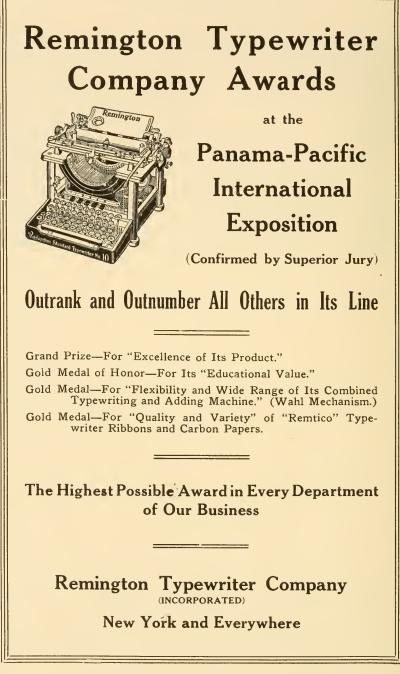
During this interim business has gone steadily onward. Competition has become keen. Efficiency is the watchword. Time has become a dominant factor. Our boys and girls **must** learn to write if they are to take their place in the business world, and to provide such training hundreds of private schools and business colleges have sprung up and flourished—their chief mission, it would seem, being to amend the deficiencies of our own public school system.

Today our schools face a serious problem as a result of the conditions thrust upon them by our sincere but short-sighted predecessors. Our schools are filled with teachers who cannot write a business hand, much less teach a pupil to do so. Seriousminded superintendents are employing supervisors of penmanship, but the infrequency of their visits to rooms serves to render their service more or less ineffective.

In an effort to aid these superintendents, The A. N. Palmer Company several years ago planned a course for teachers which might be had without cost to them, and which might be carried on without interfering with the regular duties of the teacher. The underlying reasons for the course were these: If special teachers making but one visit to a room each week are of value (and every school man admits they are), it was but reasonable to suppose that when every teacher we have becomes a thoroughly trained teacher of writing, supervising the writing of her children during the seventy-five periods each week instead of one period, we will have satisfactory writing.

There are many places in the United States today where every child in the upper grades is a good business writer—there are counties in which the patrons of the rural schools have teachers who hold the Palmer Method Teachers' Certificate, and develop expert business writers.

Members of the National Education Association and visitors to the Panama-Pacific Exposition should visit the class and exhibit room of the Palmer Method of Penmanship over moving picture booth two, and the Standard Commercial School in the Palace of Education. In the Palmer Method Exhibit will be found at all times expert instructors, who will give free lessons to those who desire them. Mr. Palmer will be in attendance much of the time. At 3:15 o'clock each afternoon a Palmer Method teacher conducts a writing lesson in the Standard Commercial School.



THE REMINGTON TYPEWRITER COMPANY

The Remarkable Part Which It Has Played in the Development of the Modern System of Commercial Education

THE Standard Commercial School in the Palace of Education at the Panama-Pacific Exposition is exactly what its name implies. It is at once an epitome and a practical working example of all the best ideas which have been evolved by the modern system of commercial education.

Such being the nature and purpose of the school, the choice of the Remington Typewriter as its exclusive writing machine equipment was natural and inevitable. Several factors entered into this choice, any one of which might well have been decisive. The fact that the Remington is "the recognized leader among typewriters" would have been sufficient. So also would the fact that all recent typewriter improvements are Remington improvements; a truth which is amply substantiated by the history of typewriter progress during the past few years. Back of both of these facts, however, is another which is the most significant of all. In selecting the Remington as the sole medium of typewriter instruction, the Standard Commercial School simply recorded the aggregate judgment of all the schools of America, which use more Remington typewriters than all other makes combined.

What is the number of Remington Typewriters employed for instruction purposes in the school rooms of America? The Remington Typewriter Company makes a practice every few years of instituting a complete census of all the schools of the country, public, private and religious, in which typewriting is taught, to determine the exact size of their typewriter equipments. The last Remington school census, taken a little less than three years ago, showed a total of 42,216 Remington Typewriters used for instruction purposes in the schools of the United States and Canada, which, as above stated, is more than all other makes combined. A new Remington census is now in progress, and so great has been Remington expansion in this field during the past three years that it is confidently expected that this latest Remington census will show a total of not less than 50,000 Remington Typewriters employed in the cause of commercial education in the United States and Canada alone.

These figures are impressive; to most people they are astounding. They justify the statement that commercial education itself in its modern development is a child of the typewriter, and in a special sense of the Remington Typewriter the creator and founder of the industry. This fact is best realized by comparing the status of commercial education at the time of the advent of the Remington Typewriter 40 years ago, with its enormous development at the present day. It is true that in the United States, at least, the commercial school antedated the typewriter. Such commercial schools as existed 40 years ago, however, were few in number and were concerned only with the general business course. Nevertheless these schools provided a ready-made vehicle for shorthand and typewriting instruction and the development of the shorthand and typewriting course to its present magnitude has been a natural sequence.

In practically every foreign country, however, it can be asserted without qualifications that commercial instruction owes its genesis to the Remington Typewriter Company. The Old World countries, at the time the Remington Typewriter first invaded these markets, had no parallel whatever to the commercial school as we know it today. It was necessary, therefore, in introducing the typewriter into these countries not only to sell the machine but also to provide the operators. Hence the creation and development in all of these countries of the "Remington School" owned and operated by the Remington Typewriter Company or its representatives-which schools have constituted the models and prototypes for all similar institutions. Perhaps in no country has the contribution of the Remington Typewriter Company to the cause of commercial education been more impressively illustrated than in British The Remington schools which are found in all the India. leading cities of India are practically the sole source through which the British Indian government obtains its supply of native stenographers and typists. Hence, these schools, although strictly private institutions, enjoy a certain official status.

When all the facts are analyzed, it will surprise no one that the Remington has been the most potent factor in the development of commercial education. Modern commercial education has arisen in response to the demands of modern business and the greatest of all the achievements of the typewriter is the revolution which it has wrought in modern business itself. It cannot be doubted that the means for the more expeditious transaction of business, provided by the writing machine, has been the main cause of the unparalleled business expansion of the past generation.

Gold Medal Award TO THE YAWMAN AND ERBE MFG. CO. On Equipment for Instruction in Filing and Indexing Methods in Practical Operation in the **Standard Commercial School** Panama-Pacific International Exposition GIVE YOUR STUDENTS MORE **EARNING POWER** Instruct them in Modern Systems and Methods of Filing, using the Y. & E. Educational Outfits Visit the Exhibit at the Standard Commercial School, Palace of Education Write for Booklet 2598 YAWMAN AND ERBE MFG. CO. **ROCHESTER. NEW YORK** San Francisco Branch 712-16 Mission Street, San Francisco, California



STANDARD COMMERCIAL SCHOOL EXHIBIT

Gold Medal Award C. F. Weber Company

FOR

School Furniture and Equipment

Exhibited at Standard Commercial School Palace of Education, P.-P. I. E.

Members of the N. E. A. invited to visit our unexcelled line of School Furniture and Supplies.

C. F. WEBER & COMPANY

365 MARKET STREET SAN FRANCISCO, CAL. 340 N. Y.

512 SO. BROADWAY LOS ANGELES, CAL.

340 N. VIRGINIA ST. RENO, NEVADA

The Primary School

is beginning to receive the attention it deserves. See the model of the new Primary School at Sacramento, designed by Shea & Lofquist, Architects of San Francisco, displayed at the California Education Booth, Palace of Education, Panama-Pacific Exposition.

The International Jury Awarded this Model the

Gold Medal

For dignity and beauty of design, heating, lighting, ventilation, sanitary appointments, open-air facilities, auditorium and other points of merit, this school stands Teachers, school officials and parents are superior. requested to visit the California Booth and inspect the model and photographs of this school designed by

742 MARKET ST. SHEA & LOFQUIST SAN FRANCISCO

WALDCRAFT LIQUID DYES For Stick Printing, Block Printing, Stenciling.

Stencting. Eight colors, red, yellow, blue, orange, reseda green, olive green, brown, black. These may be mixed to produce any desired changes. These colors are ready for use. They will not freeze or deteriorate and are reasonably durable to washing and to fight. They may be applied to paper, cotton, linen, silk, wool, velvet, leather, basket materials, wood. They do not gum or change the texture of any of these materials.

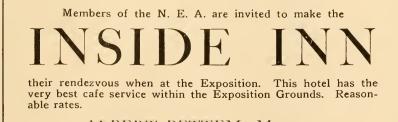
MODEL AND COSTUME CHARTS

These charts are printed on water color paper 12x18 inches in size. Each contains a model figure ehurt. and chart contains a model lighte and four complete costumes, one for sum-mer, one for winter, a coat suit and a graduation or party dress. See illustration. Extremes in figures and costumes are carefully avoided. WALDCRAFT PEG PRINTING SET

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Special attention is here called to an exhibit of drawings, paintings, designs, and craft work as well as to a model studio, all of this work having been done by students of the California School of Arts and Crafts in Berkeley. The international jury awarded this display two gold and one silver medal.

If you attend the N. E. A. meeting in Oakland you will find another exhibit by the same school in the city auditorium; and if you come to Berkeley do not fail to visit the art school where interested visitors are always welcome.

If you are unable, however, to see either the exhibits or the School, but are interested in the study of art, write to Secretary for an illustrated catalog.

> The cover design of this magazine was made by one of our students

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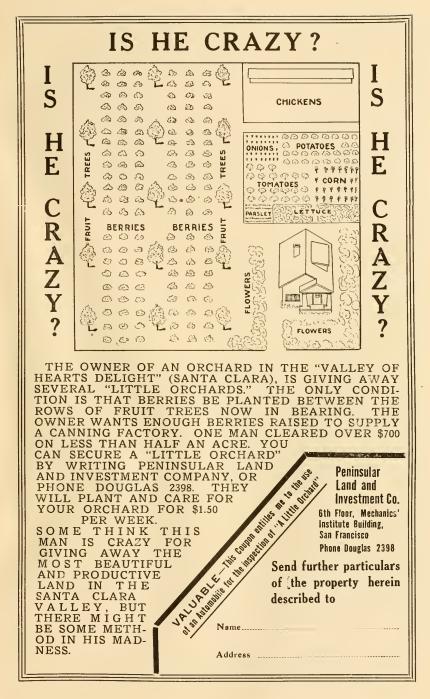
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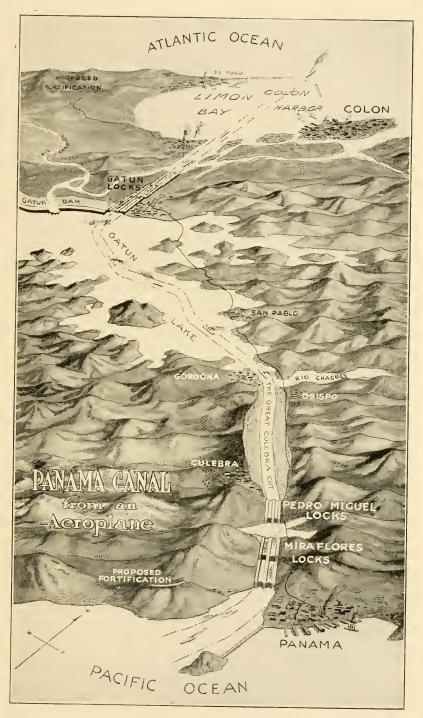
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