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Herman Lewis Palmer
September 14, 1948

Prominently identified with the architectural profession for well over a half century, Herman Lewis Palmer was called from his earthly home on September 14, 1948. He leaves a place vacant in the Illinois Society of Architects as well as the profession that will be difficult to fill even in part. Although he is no longer with us his accomplishments will live on as a firm foundation for our future activities.

In addition to his many personal and civic activities he found time for the society in an advisory and official capacity from its birth and his helpful advice and generous service have been of incalcuable value through these many years.

In 1897 a small group of architects in the Illinois Chapter, A.I.A., now the Chicago Chapter, because of conditions prevailing in Chicago after the World Columbian Exposition, demanded that steps be taken to illiminate the many evils that surrounded the profession. A committee was formed which made its report to the chapter but the report did not meet with support. However, these architects still felt there was need for an organization to conduct the business side of the profession, inasmuch as the Illinois Chapter, A.I.A. declined or neglected to interest itself except on the esthetic side. It was the activity of this committee that was the beginning of the Chicago Architects Business Association, now the Illinois Society of Architects.

Herman L. Palmer was induced to enter the activity of the Chicago Architects Business Association by several of his close friends in the group to lend his efforts as it was realized that publicity as well as additional finances were important to the progress of this young organization and the Handbook for Architects and Builders was published and augmented the treasury for many years.

It was the activity of this organization that resulted in the passage of the Illinois Architectural Act to regulate the practice of architecture. This was the first architectural act in the United States and it may be said that the passage of this act established the practice of architecture as a profession. The society has never diminished its interest in professional legislation.

When Charles R. Adams, the first secretary died in 1905, Herman L. Palmer was asked to segregate

the society's material and records from the effects of the late secretary. Space was arranged in the Art Institute of Chicago where the records were moved. President William W. Clay prevailed on Mr. Palmer to act as secretary which he did until the election of E. S. Hall.

The organization's activities grew so that the name Chicago Architects Business Association was no longer fitting and in 1914, by ballot, the name was changed to Illinois Society of Architects. It was at this time that Herman L. Palmer became Financial Secretary and established headquarters for the society and shortly thereafter installed a standard system of accounting. In 1930, with the depression gaining momentum, the entire funds of the society, which had been built to a comfortable balance, were expended on a promotional campaign, contrary to his advice, leaving a depleted treasury at a time when it was a hardship for same to pay even the

small amount of dues. These were difficult days for individuals as well as organizations and it was the financial assistance of our financial secretary that helped the organization through the depression years. His office and his time were used freely for the society and the unemployed.

In all the years it was his quiet help because of that bond of friendship and understanding of that group who founded the society who have preceded him into the great beyond and his characteristic sense of duty that has kept the society an independent organization dedicated to the best interests of all those in the profession.

The enactment of the Illinois Architectural Act became known throughout the United States and soon other states passed similar laws. As the number increased Illinois architects requiring registration in these various states began to encounter delays. Harry B. Wheelock, the first president of the society, except for two or three months that J. M. Van Osdel filled the office, and who was the spearhead in the legislation that resulted in the passage of The Illinois Architectural Act, conceived the idea to form an organization to facilitate registration for those desiring to practice in more than their home state. The matter was discussed at length with his friend Herman L. Palmer after which it was presented to the board of directors of the society. The idea of an organization as proposed was heartily indorsed and the society organized the National Council of Architectural Registration Boards. The council was to function independent of any organization and in order that no personalities would enter into it, Mr. Palmer advanced the necessary funds to the society so they in turn could set up the preliminary funds for the council. It was intended that the council would be a convenience to architects but it was not intended to change reciprocal courtesies for those architects who may change their residence or infrequently find it necessary to require registration in various other states. The history of the N. C. A. R. B. is familiar to all in the profession.

The Architects Club of Chicago was started with high purpose and a membership of the foremost in the architectural profession and the building industry. It was a source of grief to Mr. Palmer that after years of successful operation failure due to conditions and that the donee of the Glessner House did not provide to accept the legacy. He was accountable for the sale of most of the bond holding memberships and felt it keenly that these generous people who provided the funds to buy and furnish the Kimball house should suffer a loss. He was chairman of the house committee and a director of the club, member and secretary of the executive committee and secretary of the trustees during the early years.

The foregoing is related, particularly the early history of the society, because of its importance to the architectural profession and the large part Mr. Palmer played in the success of these accomplishments. He has been a motivating force through the years and it is impossible to recount all the benefits that have accrued to the profession through events in which he and the society have taken part.

The profession was fortunate that Mr. Palmer was not dependent on the practice of architecture for a livelyhood. His business interests were numerous.

He was forever guided by the golden rule, a forgiving nature returning good for evil, kind, unpretentious, forthright, a native Chicagoan, prominent in civic affairs, a lifelong Republican and past president of the Old 25th Ward Republican Club which comprised the Town of Lake View. He possessed a tenor voice of quality and was a member of a quartet. Opera was his special enjoyment.

He leaves his wife, Lillie R. Palmer, son Gerald L., daughter Mrs. Ruth P. May, and grandson Gerald L., Jr.

His memory will be cherished by his many friends throughout the nation and he will be missed. A quotation from the poem, The House by the Side of the Road, read at the services by a life long friend expressed his character and attitude toward life,

"Let me live in my house on the side of the road and be a friend to man."

— *William Paul Fox*

NO EVIL CAN HAPPEN TO A GOOD MAN, EITHER IN LIFE, OR AFTER DEATH — SOCRATES.

Most architects of Illinois have received a request to vote on preference clauses of a bill to change The Architectural Act. In a study of the proposals practically all of them were parts of House Bill 801 which the Illinois Society of Architects introduced in the last session of the legislature.

The Illinois Society of Architects feels an especial interest in matters of legislation within the State of Illinois because it was responsible for the passage of the original act and restricts activities of the society to matters within this state.

Regardless of the memberships of other organizations, the Illinois Society of Architects is the only organization without any out of state dictation as to its policies and none of its activities are in any way limited, directed or stimulated by outside or parent organizations.

The claim has been falsely made that the Illinois Society of Architects through H. B. 801 intended to prevent license by reciprocity but this is not true and can hardly be supported by those making such statements. What the society attemped to do was to eliminate senior examinations. The Illinois Society of Architects formed the National Council of Architectural Registration Boards to facilitate the registration of architects in other states. Some of our members and many others have had a variety of experience in the matter of registration by reciprocity.

Our members should write the society headquarters of any special problems posed by The Act or that might be cured by revision and the officers and directors are confident such changes will be made that will be of public interest and in that light will be desirable to those in the profession.

Why an organization claiming in their literature that they believed it fortunate that the Bill presented by the Illinois Society of Architects was defeated and now propose much the same legislation is difficult to understand.

"Let nations remember they are but men."—Psalm 9:21

American Academy in Rome Offers 14 One Year Fellowships

The American Academy in Rome has announced 14 fellowships for mature students and artists capable of doing independent work in architecture, landscape architecture, musical composition, painting, sculpture, history or art, and classical studies.

The fellowships, to be awarded on evidence of ability and achievement, will be open to any citizen for one year beginning next Oct. 1, with possibility of renewal. Each fellowship includes $1,250 a year, transportation, studio space, free residence at the academy, and additional travel allowance. The total estimated value is $3,000.

Applications must be received by Feb. 1, 1949. Requests for details should be addressed to the executive secretary, American Academy in Rome, 101 Park Ave., New York 17.

Californians Band to Save Giant Pines Periled By Lumbering

Californians, who several generations ago organized a successful "save the redwoods" campaign to preserve the world's largest and oldest trees from extinction, have turned their attention to conservation of some of the country's largest pines.

These are the magnificent ponderosa and sugar pine varieties, towering to heights of 250 feet, clustered mainly in one expansive grove along the north fork of the Stanislaus river on the west slope of the Sierra Nevada mountains in Tuolumne county.

Hundreds of specimens, 10 feet and more in diameter and comparable in grandeur to many of the revered Sequoia redwoods, are threatened by lumbering operations, just as the Sequoias once were.

Apprehensive citizens have formed an organization entitled the California War Memorial Park association, which held a preliminary meeting recently to seek state and federal assistance in making a preserve of the pine grove. The grove lies between Calaveras state park and the famous south grove of Sequoias, long a tourist attraction.

The Nightingale Floors of Nijo Palace

Henry McLemore reports on his travels in Japan that the city of Kyoto was one of the few cities spared the ravages of war because of its more than three thousand Buddhist temples and Shinto shrines. Our aviators dropped leaflets telling the Japanese that it would be spared but they thought this was a ruse to lead them to slaughter, so Kyoto was avoided save by a trusting few, but today it is as it was in 1939.

Kyoto, he reports, was a lovely spot and if one saw the Nijo palace he would be rewarded for the trip. Its construction was started by the first Shogun by the name Leyasu and was completed in 1624 by the third Shogun one Tokugawa Temitsu.

The things of interest to most visitors, were the floors of the palace. They are known as nightingale floors, because as one walks on them, they give off the music of nightingales singing. It is a sweet, low sound, very musical to the ear.

For many years, architects have tried to discover the secret of the floor. They have pried and proded at joints, taken up planks, but have gained no knowledge as to how the music is produced. The secret died with the architect.

Modern Ventilation Practices

John J. Aeberly
Consulting Engineer

It is not necessary to introduce John J. Aeberly to Chicagoans. To those of our readers beyond, he has been associated with the ventilating industry in the broad development of ventilating practices not only to provide air conditions assuring human comfort, but also many systems necessary for proper industrial sanitation.

The ventilation of enclosed spaces is an age old practice which plays an important part in our every day life. Like all activities of this type under a free enterprise system, we find a lot of misrepresentation and a use of common words leading to a great deal of misunderstanding. For this reason I want to clarify the meaning of the word Ventilation as I refer to it in this article so as to eliminate some of the confusion which has been caused by the misuse of the word air conditioning in the promotion of sales. For many years, ventilation as contained in legal requirements, as found in scientific literature, and as used by the general public, referred to air in enclosed spaces providing an air environment for human beings so as to protect and maintain their health and comfort. It included consideration of the physical properties of air, temperature, humidity, velocity and discharge direction, barometric pressures, dust, fumes, gas and bacteria content and also consideration of specific heat of a structure, the outside wall exposure, heat loss and other physical factors, as these conditions would influence the need for a change in the air of spaces to promote and protect the health and comfort of human beings. Some fifteen or twenty years ago the psychometric chart came into more general use among ventilation engineers and the words "conditioning of air" were used when the temperature and humidity of air was changed to "within controlled limits." Today the word air-conditioning may mean most anything in the field of ventilation.

Our knowledge of basic requirements for proper ventilation has changed little in recent years. The criterion for health and comfort of occupants of enclosed spaces in which they are the only source of contamination is an air supply having a temperature, humidity and motion so as not to unduly exercise the heat regulating mechanism of the human body, a control of dust, odor and bacteria content not normal to the outside air when such air is taken from an uncontaminated source. In industrial and commercial establishments we frequently need to consider additionally the basic limitation fixed by the medical and engineering researches allowing certain tolerable amounts of dust, liquids, gas and bacteria in the air envelope of man without materially affecting his health and comfort. Although I have stated the problem simply, there are reasons why, due to the ramifications of man's physiological reaction to his environment, ventilation in occupied spaces frequently fails to protect and promote the health and comfort of human beings.

A reasonable approach to obtaining proper ventilation is to proceed, as follows:

1—Determine the physical characteristics of the structure, housing the spaces to be ventilated and an analysis made to properly evaluate the effect of these on the air in the various spaces.

2—Determine the "room purposes" accurately; both the kind of human occupancy activities and the industrial or commercial processing.

3—Familiarize yourself with basic and simple laws of physics dealing with air in motion.

4—Obtain reliable information regarding the action of the equipment which industry has to offer and to be used for ventilation purposes.

5—Use all this information in a logical, coordinated whole to give the owner of a structure the satisfaction of knowing he possesses a building closely meeting his needs and promoting the interest of the community in maintaining health and comfort of all the occupants after his bills are paid.

If you truly wish to measure up to your moral duty as well as your economic purposes, let us analyze in some detail the problems involved in the design of ventilation for various types of structures such as residences, office buildings, auditoriums to include theatres, commercial establishments such as restaurants and night clubs, and a few of the industrial groups, being mindful of the five categories previously indicated:

The ventilation of homes or residences presents little difficulty to the architect. The customary practices such as providing 10% of the floor area in windows, 50% of this area to open, results in a proper means for maintaining an adequate air supply from outside, both in summer and winter. Upon the judgment of the architect rests his selection of a good job of insulation and a heating plant which will keep the heads of the occupants cool, their feet warm and their bodies free from drafts. The laws of physics tell us that this is an upside down requirement, namely: the warmer air will be in the higher levels. What then is the answer? The building industry has learned that radiant heating can be designed so as to do a surprisingly good job in maintaining at least some measure of approximating uniform temperatures at different levels in a room. There are certain practical difficulties, particularly in low cost housing structures. Oversizing the radiating surfaces in hot water systems and increasing the capacity of air moved by a furnace system will have a tendency to approximate the results obtained in a radiant system. The practical control of odors in the home or residence is still dilution with outside air for oxidation. The use of such substances as ozone released in occupied spaces is still in the experimental stages. When air cooling is contemplated for the home and refrigeration is the means for cooling, it should be a designed job and not a hit-or-miss installation. When such designed systems are equipped with efficient dust filters and the room is made tight so that practically all the air entering the room is drawn through the ventilating system, hay fever patients and others allergic to certain types of dust can obtain much relief from their afflictions.

Home cooling can be obtained by exhausting large volumes of air from the building through the attic spaces. This method gives good results if the fans are quiet in operation, and of sufficient capacity. The success of this system depends upon night operation of fans when the outside air is cool.

In the office type of building the problem of ventilation presents many more difficult situations. The large reduction of cubic feet of space per occupant in office buildings as compared with the home, the limited ceiling heights, variation of floor area to occupant and other pertinent facts regarding the structure, the architect must apply his knowledge carefully. If windows are to be used for natural ventilating air supply, and these windows are to be separated from the general office spaces by private office partitions, regardless

of the type of partitions you design, there will be a long period in the winter months when these windows can only be used for ventilating the private office space and your ventilation for the general space is a failure. This is also true if the employees are arranged along and close to the windows. For such spaces, and invariably there are many in office buildings, the design and installation of mechanical ventilation is the practical answer and a must.

The ideal design in all types of mechanical ventilation is to blanket the in-coming air across the ceiling of a space and to exhaust at the floor. It is impractical to put the exhaust openings in the floor in the office spaces of buildings. Well selected outlets near the floor, located in the side walls and partitions, are good substitutions for floor outlets.

The ventilation industry has developed ceiling and wall supply outlets, which when properly selected as to size and located correctly, will give excellent results except immediately adjoining cold surfaces such as outside walls and single thickness glass windows. This is true in both summer and winter if the summer conditions are obtained by air-cooling as one of the factors. The answer to this problem rests entirely with the architect and the designing engineer. The architect will be required to provide proper recesses for radiators in outside walls with ornate designs for shielding such radiation and if the heat supply is by means of a blast system, ornamental designs of duct work on the outside walls are necessary. I wish to emphasize this particular problem because invariably it is the basis of complaint of poor ventilation in office buildings. When this problem is solved, the control of the temperature in these buildings at a much lower level will follow.

The ventilation of an auditorium, especially in the theatre, involves all of the problems arising in ventilation wherever contamination is due solely to the occupants. The small amount of floor area per person as well as the limited amount of cubical content per person in the mezzanine and balcony levels causes a difficult situation in the control of heat from the occupant. Crowding in these spaces is a serious situation and emphasizes the need for the prevention of infectious diseases and the control of odors and humidity.

Much of the detail involved in a proper design of ventilation for the theatre auditorium is fundamental to all types of structure and therefore it should be of interest for this purpose to treat with ventilation at some length. Air cooling as well as heating of air are necessities. The quantity of air to be moved by the system is most generally determined by the cooling load and not by the legal requirements; the control of odors is important and air must be distributed to the occupied areas in proportion to the number of persons in a limited space without causing drafts. The early designs in these spaces showed much individualism. Most of these systems failed to utilize, properly, the physical properties of air and most of these fell short of good performance. Some were even complete failures. Today we know that air for ventilation should not be released from the ducts until it has been delivered in proper quantities in the immediate area in which it is used. This precludes the use of the ceiling at the proscenium arch even though there are several good reasons for this location in a design for cooling only. Regardless of the difficulties which may be encountered, the air supplied to the auditorium must be blanketed in close proximity with the heads of the audience, which of course, means not more than ten feet above the floor level wherever this is practicable. Over areas like the orchestra circle and similar high ceilinged spaces it will tax the skill of the architect and engineer to accomplish this purpose; utilizing multiple directional discharge sidewall registers will be of considerable aid.

In this type of space, it is practical to place the exhaust outlets in the floor and when this is done, you have an arrangement which will be satisfactory for both summer and winter operating requirements. The old style mushroom system of supply was a complete failure when the cold air for cooling requirements was passed through this type of system and supply at the floor levels for this purpose has been abandoned completely. Another fallacy which has since been relegated to the scrap heap was the idea that in a theatre auditorium the air could be drawn around satisfactorily by means of exhaust. Ofttimes, exhaust outlets were located underneath the balconies and mezzanine levels with the result that excessive temperatures were invariably experienced particularly in the galleries. If you want a space kept cool, you must put cool air in such spaces and not draw off the hot air in the general auditorium space. I have seen this type of exhaust design result in temperature variations as much as ten to twelve degrees in a single auditorium and the low temperatures, ironically, were found where the women were dressed in decollette; for example in the orchestra circle and box seats whereas the higher temperatures were found in the galleries where most people were dressed in ordinary street clothing. It has been demonstrated that a well designed system, as herein suggested, properly operated, may result in temperature variations of as little as two degrees.

The equipment which the manufacturer can now furnish is of such performance that one can expect to get results within two degrees variation. The architect will be required to give a greater amount of space for duct work which he so frequently allows reluctantly to this purpose.

The ventilation of commercial and industrial establishments presents problems which at times are little understood by either the architect or the ventilating engineer. This situation grows out of the seeming reluctance of men responsible for the design to go beyond the study of the use of their technical knowledge already established and to search out the technical information required of them to help the owner solve his problems.

It is not always a difficult undertaking to design a ventilating system to fulfill the needs of a restaurant owner, or other similar commercial establishments. Here we usually have the cooking odors as the major problem. It is not only necessary to remove the odors from the structure but to discharge these odors at such a point that it does not create a nuisance to the neighbors in the vicinity. Oxidation of odors in these establishments can be accomplished in the practical sense by introducing large quantities of outside air for ventilation purposes. The destruction of odors by ozone and other oxidizing methods or the absorption of the odorous fumes and gases by the activated carbon method has as yet not been developed to a point where these methods are sufficiently effective that they can be made available at reasonable cost in order that they may come into general use.

In the chemical industry, rubber industry, the manufacture of wire enamel, the plating industry and many other such establishments where fumes and gases of all types having various degrees of toxicity are found, the real problem in industrial hygiene is presented. It is here that both the architect and engineer must draw heavily upon his scientific knowledge if he is going to protect the owner from costly expenditures which are ofttimes made for equipment and which falls far short of its purpose. We have seen systems which have cost upwards of $100,000 which should have given service over a period of from six to ten years, fail within three or four years because of faulty design. The architect could do much in this field by carefully studying the nature of the products as well as the line processing when he sets out to plan a structure for a large manufacturing plant. Many times there are substances that are given off

which are dangerous and detrimental to health and which must be controlled in order to protect the public health. The mechanism needed for the control of these substances will require additional story heights in a multiple story building, means for hanging ducts such as trusses and girders, and shafts for vertical ducts in the middle of the building. There is a fundamental understanding among industrial hygienists throughout the country that it is difficult to draw air from a contaminated source, clean it sufficiently and return it to the breathing zone of the occupants of buildings, and be assured at all times of proper public health protection. In the City of Chicago, this situation has been recognized at law and therefore such installations are not allowed.

The architect should recognize immediately the problem involved in such a situation. Unless he can design the structure and the manufacturer can design its equipment so that the air can be returned to the machine without reaching the air envelope of the workmen, the architect will be compelled to discharge this air from the building at a point where it does not become a nuisance to the neighbors and he will therefore be required to provide a much larger heating plant to take care of the increased heating load. If the architect will provide for a ceiling height and anchorage for duct work so that two sets of ducts may be run overhead without interference with the cranes and other movable equipment, this problem becomes one of much less cost and of easier solution than would otherwise be the case.

If you have carefully studied the labor-management relation which is rapidly growing in this country and realize that second to wage demands is the insistence of the employee representative for healthful working conditions, you must come to the conclusion that management must consider it paramount that structures be designed to adequately protect the health of the employee.

I would suggest that all of you brush up on your knowledge of the basic action of matter: in the solid, liquid and gaseous state. The fundamental physical laws will serve you properly if you have them well in mind and with the acquired knowledge of the medical limitations placed on the toxic limits of many of the substances used in industry, you will be able to evaluate not only the capacity of the systems you require but by what method these quantities of air should be used to prevent public health nuisances both inside and outside of a building.

The ventilating industry has contributed liberally of its knowledge and developed many forms of equipment, which when used properly will do a good ventilating job. The highly developed systems of cyclone collection, the bag house collections, the washers of the various types, the firing apparatus have all been successfully used in controlling these nuisances. There are, of course, many research problems in this field which as yet have not been consummated. There has also been introduced in this field, new equipment which has not been extensively used up to this time (1948). In this connection I have in mind the collection of fine dust, only a few hundredths of a micron in diameter, which collects in devices that apply the supersonic wave motion. The electrical precipitator has also reached a degree of development giving surprisingly good results.

In conclusion, I believe that if the professions will work hand in hand and assume their full moral responsibility as well as their economic urge, the coming years will show a marked development in the use of ventilation. In my many years of experience with ventilation, I have learned that many property owners are anxious to satisfy their tenants and have expressed a willingness to pay liberally for the mechanical ventilation of their buildings if they could get the results they were promised and hoped to get. The architect must remember that after he has crossed the preliminary

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Palomar and the Architect
"Just Ask Porter"

That's what the Palomar astronomers say when they're stuck with a tough problem. Meet the 75-year-old wizard who always comes up with the answer.

While the huge new 200-inch telescope mirror recently completed the last leg of its hazardous journey through snow, ice and fog to the top of Palomar Mountain in California, a little 75-year-old Vermonter stood quietly in the shadows of the huge dome. As the 17-foot pancake of miraculously smooth glass was hoisted off its trailer, he wore the happiest grin in the place. This man was Russell W. Porter, artist, architect and ideaman-extraordinary of Palomar.

As soon as the enormous mirror is in place, testing and adjustment will begin. Then in a few months, the giant sky camera will start probing a billion light-years into space, gathering knowledge of stars and galaxies utterly beyond reach today. The new data it collects may go far toward explaining the origin of the universe. *Whatever it does, a generous portion of the credit belongs to Russell Porter and his genius for looking at machines with the eye of an artist.*

Porter came on the 200-inch job in 1928. He had no definite assignment. "What do you want me to do?" he asked Dr. George E. Hale, founder of the project. "Just *be* here," said Hale. Scarcely a day has gone by since that Porter has not had some influence on the final result.

He Made His Own Job

He has no title; he is too many things: architect, designer, philosopher, diplomat and smoother-outer of difficult situations.

Hale hired him as an architectural consultant, but he soon made his own job. The astronomers were constantly facing major problems that had to be solved before big money could be spent. Most of them were not engineers. Blueprints confused them. "Wait a minute," Porter said once, "I'll blow them apart for you."

He seized a big sheet of paper and began translating in pencil. Out of the jumble of blueprint symbols grew a vast telescopic machine in three dimensions. Whimsically, the artist threw in a tiny human figure for comparison. He held his drawing up. There was a murmur of surprise and delight. The question suddenly became clear. Decisions could be made.

That was the start of a type of engineering design as daringly original as the 200-inch itself. Porter's drawings were not just pictures. They were visualizations — "cutaways" — showing machinery in three dimensions inside and out at the same time. Porter's combination of engineering sense and artistic genius made his cutaways virtually unique. He could project any part of the whole vast instrument as it would look when finished; he could make solid metal transparent, spotlight a detail or a principle. A Porter drawing was better than a scale model, and hundreds of times quicker to make.

Tracing The Path of Starlight

The Palomar giant is the first telescope so big that the observer climbs inside. It was Porter who visualized the man in the "prime focus cage," showed how much room he would have and how he could stay upright however the machine was pointed. It was Porter who first pictured the Gargantuan dome, who visualized the best way to hold the observer at the Cassegrain focus behind the mirror, who traced the hop-skip-and-jump path of the starlight as it darted through a nest of small mirrors into the depths of the spectrographic laboratory far below.

This visualizing-before-deciding has gone one steadily for 19 years. In that time Porter has made innumerable cutaways of every important detail. But that wasn't all, Porter's imaginative pencil soon broadened his importance. Presently Hale set him to work designing the "optical shop" — a big, windowless, air-conditioned building in Pasadena. There,

over a period of 11 years, the disk gradually took on its special surface in an atmosphere surgically clean of dust.

Born in Springfield, Vt., in 1872, Porter learned architecture at M.I.T. Finding no design work to do after college, he went off to the Arctic with Peary on a couple of early expeditions and came back with magnificent sketches of Eskimos and ice.

He accompanied two more polar expeditions as artist and meteorologist in the next few years. On the second, the ship was crushed in the ice and Porter, attempting to lead a small party south for help, disappeared. Eventually the main body of the expedition got home. Its commander, Anthony Fiala, organized a new expedition and went in search of his lost men. He found Porter and one other, after they had been marooned on frozen Franz Josef Land for nearly two years.

Enough of the Arctic

The Yankee architect never ventured north of Maine again. He married the postmistress of tiny Port Clyde and settled down to building cottages. But reading an old book, he got interested in telescopes, and made a small telescope mirror. He soon became fascinated with the art and got a job as optical expert with Jones and Lamson, machine makers in his old home town of Springfield. Here he built a new kind of reflecting telescope for Ex-Governor Hartness of Vermont, and invented an "optical comparator," a precision measuring device.

Porter had settled down to a quiet life in 1928 when George E. Hale, director of Mount Wilson Observatory, conceived the 200-inch telescope project and procured $6,000,000 of Rockefeller money to build it. *He had already got hold of the world's top experts in optics and mechanics.* Now he needed something else: an artist-scientist with creative imagination. He heard about Porter and sent two men to Springfield to see him.

Porter was off on a picnic, and returned as they were climbing back on their train. But his old friend, former Governor Hartness, had spent the day with them.

"Nice fellows," Porter remarked as the train pulled out. "Who were they?"

Hartness told him.

"Thunder! Why didn't you send for me! I might have persuaded—"

"Russell," Hartness grinned, "that was the luckiest picnic you ever went on in your life. It's all fixed. You're going to California."

The cloistered atmosphere of the Astrophysical Laboratory at California Tech just fitted Porter. First the cutaways, then designs for the optical shop. Then original concepts for the Schmidt telescopes, the museum at Palomar, the overall landscaping. After that, a place in the high councils, and the reputation of being the one man who invariably kept his temper and his freshness of mind.

When war came, the telescope team went to work for the Navy on top-secret scientific work — landing craft, "ducks," rockets. One after another Porter visualized the new weapons, made cutaways of them, helped speed up the research.

Halfway through, Editor Albert Ingalls of "Scientific American" wrote him that the Army was hard up for "roof prisms" — little hunks of glass with faces polished to unbelievable accuracy. Porter helped round up amateur polishers in a hurry to break the bottleneck.

Retired But Busy

At 75, Russ Porter claims he has retired. Actually, he is as busy as ever. When he isn't hunched over his drawing board or driving to Palomar he's home working out strange new optical sundials to ornament his garden and his friends' lawns.

Personally, he's small and quiet. Deafness (the result of his Arctic experience) only partially corrected gives him an aloofness and pre-occupation which keeps people from bothering him unless they really have something to talk about.

All over the country professional telescope-makers seek Porter's help in making cutaways to visualize their blueprints. But he takes only the cream of the jobs offered.

After all, his main interest is the 200-inch and it will remain a monument to his skill and devotion for generations to come.

By David O. Woodbury

Note: A full account of the 200-inch telescope project from its inception, together with a number of reproductions of Russell W. Porter's drawings, and much further information as to his connection with the project, is contained in THE GLASS GIANT OF PALOMAR, by David O. Woodbury, published by Dodd Mead & Co.

Illinois Society — Sept., Oct., Nov. Meetings

The first meeting of the season, September 28th, was held in the clubroom of the Art Institute of Chicago with a good attendance. The meeting was called to order by President Bernham. Secretary Koenigsberg was called on and read the minutes of the annual meeting and also the special emergency meeting of July 20th, they were approved as read.

In tribute to the memory of Herman L. Palmer, the members stood in silence. President Bernham commented on his long, generous and interesting help to the profession and the Society.

The action of the Chicago Chapter, A. I. A. in the matter regarding the professional engineers was discussed and Richard Schmidt reported on the subject as it was handled at the September meeting of The Chicago Chapter.

William P. Fox, Chairman of the Legislative Committee, read a letter from Byron Dalton and spoke on the proposed building code for Chicago.

The Society was fortunate in having Capt. Robert H. LaCoy, Captain Corps of Engineers, U.S.A., who told of 5 ways by which architects may secure commissions in the Organized Reserve Corps which was helpful to many of our members who served in the armed forces.

The members, according to schedule, then proceeded to the Chicago Lighting Institute for a trip through the new exhibit room and laboratories where the latest in lighting was exhibited.

They were seated in the well appointed and ventilated auditorium where under the direction of Carl W. Zersen, members of the staff demonstrated the lighting effects in the auditorium itself and this was then followed by a lecture demonstration on the stage, dealing mostly with the operation, the types of fixtures and colors availabe in incandescent and flourescent lamps. Following this one hour meeting in the auditorium the members of the society were then taken on a tour of inspection of the rest of the quarters. This included the photometric laboratory, the classroom, the clinic, the large reception lobby, and the two front offices. In each room members of the staff demonstrated a variety of lighting effects; for example, in the clinic they showed 6 booths and each one contained identical samples of the wallpaper, carpet, drapery, and wood, and each booth was lighted with a different color temperature lamp making it seem as though all of the exhibit materials were different from each other. Also in this room was a large scale model store to demonstrate store lighting. In the reception lobby were large circular suspension type cold cathode fixtures. Walls are lighted from valences, panels of glass and plastic were edge lighted.

The private office lighting consists of an eggcrate louver covering the entire ceiling. Two levels of lght are available in this room, 50 footcandles and 100 footcandles. In the general office there is equipment from 3 different manufacturers illuminating the office to a light level of 63 footcandles.

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The meeting was well attended and enjoyed by all.

October 26th, the regular October meeting of the Illinois Society of Architects was held in the usual meeting place, the clubroom of the Art Institute of Chicago. President Bernham called the meeting to order and proceeded with the regular order of business. The minutes of the September meeting were called for and it was voted to dispense with in order to expedite the meeting. Three of the many newly elected members were present and were introduced, George Braun, Jr., William Johnson, and Max J. Wolfson.

President Bernham then introduced Mr. Lars Marnus of Denmark, the speaker of the evening whose subject was to be the "Rationalist Movement in Architectures in Scandinavian Countries."

In order to have the students of the architectural department, U. of I., Navy Pier, hear the illustrated talk the meeting was adjourned to the large assembly hall at the end of the pier where between 3 and 4 hundred heard the lecture and saw pictures and slides. President Bernham introduced Mr. Marnus to the audience when the meeting assembled at the pier and after an enjoyable evening the president thanked Mr. Marnus for giving the lecture.

The opportunity to view the photographic exhibition of Marcel Brewer, internationally known architect and designer of furniture, which is the first of a series of exhibits in the new art gallery at the Navy Pier was a part of the evening.

The meeting was pleasant, interesting and well worthwhile.

The November meeting was held on Tuesday, the 23rd of November, in the clubroom of the Art Institute of Chicago. President Bernham called the meeting to order, after an excellent dinner, and Secretary Koenigsberg read the minutes of the October meeting which were approved as read.

A report was made by William Paul Fox, Chairman of the Legislative Committee, on a radio forum on the proposed new Chicago Building Code. Discussion was chiefly whether or not the code as proposed was purely a performance code and there also was some discussion of the proposed powers of the commissioner of buildings regarding interpretations and rulings and whether or not powers of the Council will be delegated.

Mr. Lloyd H. Yeager, General Manager of the Gypsum Association, was introduced as the speaker of the evening. After a brief introduction which was slightly interrupted by questions from the floor, showing the great interest by those present, the three reels of film were shown. White Magic, Gypsum Lath and Plaster, Gypsum Sheathing and Wallboard were the titles of the pictures and those present all agreed these were the finest films of this type they had ever seen. These films have been selected by Paramount Pictures for early release to movie theaters throughout the country as one of its Popular Science Shorts. The architect is very well portrayed and the films show the need of architectural services.

After the pictures there was a great number of questions put to Mr. Yeager involving matters of jurisdiction, specifications for various types of plaster, accoustical plaster, and many questions on fixing of poor jobs or those showing defects for one reason or another and the use of radiant heat in ceilings.

The meeting adjourned at 10 P.M. and was voted a most entertaining and profitable evening. After adjournment many members remained and kept Mr. Yaeger busy with specific problems. New literature on Gypsum Lathing and Plastering, Gypsum Lath, Gypsum Sheathing, and Standard Specifications for Gypsum Plastering were available to those present.

Announcements

Meyer and Cook, architects, formerly located at 800 N. Clark St. have moved their office to 1915 N. Lincoln Ave., Chicago.

Louis H. Gerding, architect, has moved his office to Suite 102-104 Central Life Building, Ottawa, Illinois, in which city he has practiced for many years.

Julius Floto, Architect and structural engineer, member of the Illinois Society of Architects for many years, has retired from active practice as of October 15, 1948 and has moved his residence to 1051 Union Street, Manchester, New Hampshire. Mr. Floto will be missed by his many friends in this area both among his professional associates and those in the building industry.

Laurence P. Johnston, Architect, 1515 Sherman Ave., Evanston, Ill. has changed his address to P. O. Box 2623, Juneau, Alaska.

Casriel Halperin, Architect, has moved his office to 410 S. Michigan Ave., Chicago 5.

Philip A. Faro, Architect, has moved his office from 9130 Commercial Ave., to 3039 East 92nd St., Chicago 17.

McCaughey and Peterson, Architects, Park Ridge, Illinois have dissolved partnership, William F. McCaughey remaining at the Park Ridge address and Raymond A. Peterson established his office at 1609 Sherman Ave., Evanston, Ill.

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hurdles and the construction project has been properly designed for utility, he must review his plans immediately to make sure the ventilation designed will assure the health and comfort of its future occupants.

Salzburg Cathedral

To help reconstruct the renowned and beautiful Salzburg Cathedral, Austria has issued a set of 8 semipostals. The 17th century cathedral is one of Renaissance style.

Each of the stamps illustrates a cathedral scene and the different denominations will be in different colors, including green, rose violet, grey, brown, red orange and deep violet.

Herman Lewis Palmer—obituary page 1.

Robert C. Bullard, Springfield, Ill., Architect for more than 50 years, funeral services were held October 16, 1948. He was the surviving member of the architectural firm of Clark W. and Robert C. Bullard. Among the buildings in Springfield he designed are the present City Hall, Unity building, the Fox-Lincoln theatre.

Clark C. Wright died October 12 in St. Lukes Hospital after a brief illness at the age of 68 years. He joined the architectural office of George C. Nimmons in 1915 and later was admitted to partnership and the firm name became Nimmons, Carr and Wright. Two years ago the firm name was changed to Carr and Wright. He participated in the design and construction of buildings throughout the United States, many being stores, offices and other buildings for Sears, Roebuck & Company. Interment Streator, Ill.

Arthur Guy Mayger, Architect, died of a heart attack December 10 in a New York City department store. He was formerly a partner of A. S. Graven and practiced under the firm name of Graven and Mayger. They were architects for a number of theatres particularly in the middle west. In recent years he lived in Scarsdale, N. Y. He was an infantry captain in World War 1.