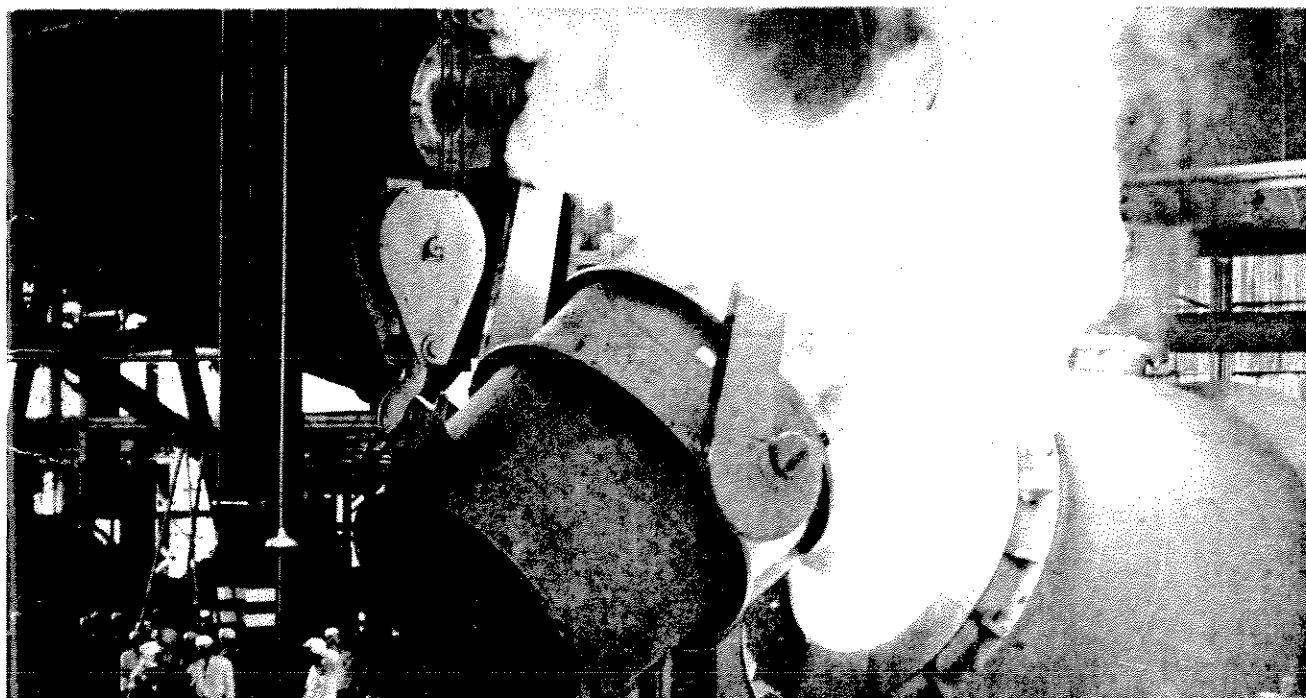


Volume 2 — 1963

YEAR BOOK
of the
COLORADO CHAPTER
of the
INTERNATIONAL CONFERENCE OF BUILDING



COLORADO



HON. JOHN A. LOVE
Governor of the State of Colorado

THE STATE OF COLORADO
EXECUTIVE CHAMBERS
DENVER

JOHN A. LOVE
GOVERNOR

March, 1963

Greetings to the International Conference of
Building Officials

I am happy to have this opportunity to
welcome the Colorado Chapter of International Building
Officials to Denver and to what I am sure will prove
to be a most productive three-day Seminar.

I hope and trust that you will each benefit
and prosper from these meetings, and at the same
time, have an enjoyable visit in our capitol city of
Denver.

I wish you the very best of luck and success
in your deliberations.

Sincerely,

JAL:mu

THE COLORADO CHAPTER OF THE INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS:

The Colorado Chapter of the ICBO is one Chapter of an International non-profit organization of Building Code Officials. This organization published the first "Uniform Building Code" and subsequent Uniform Building Codes throughout the years. This Code is published in several languages and has been adopted by more than 13,000 Government jurisdictions. Most Cities and Counties in Colorado have adopted the Uniform Building Code and it is used as a Standard by several State Agencies.

Membership in the International organization includes Cities, Counties, States, the Government of Japan, Industrial and Professional Organizations and individuals in the construction industry. The Colo-

rado Chapter membership is limited to Inspectors of Governmental Agencies. We have about 105 members in the Colorado Chapter.

The Colorado Chapter meets bi-monthly in Cities throughout the State of Colorado and Wyoming and conduct an annual Seminar in Denver. The last Chapter meeting was held in January in the City of Loveland.

The purpose of this fine organization is to provide a method of pooling and utilizing the best skills and resources available to promote uniform inspection, better building construction and a medium of greater public safety.

WYOMING



HON. CLIFFORD P. HANSEN
Governor of the State of Wyoming

STATE OF WYOMING
EXECUTIVE CHAMBERS
CHEYENNE

Governor Clifford P. Hansen of Wyoming was born in Zenith, Wyoming, in 1912. He was graduated from the Jackson-Wilson high school and earned his bachelor of science degree in agriculture from the University of Wyoming in 1934.

In the years following his graduation, he became known as an outstanding Wyoming rancher and contributed a great deal to higher education in the state.

Mr. Hansen was named to the University of Wyoming board of trustees in 1946 and served as its president, 1956-63. He was ex-officio chairman of the Wyoming study of higher education completed in 1958; regional director of the Association of Governing Boards of State Universities and Allied Institutions, 1956-57; and a participant in many activities sponsored by the Western Interstate Commission for Higher Education.

Mr. Hansen was state president of the Wyoming Stockgrowers Association, 1953-55; Interstate Streams Compact commissioner for the Snake River, 1947-49; county commissioner in Teton county for eight years and chairman of the board for six; master of the Jackson Masons, 1948; Jackson Rotary president, 1945; and Lions president, 1958.

Mr. Hansen became Governor of Wyoming in January, 1963.

COVER PICTURES

Industry at work in Wyoming—American Oil Co.—Casper, Wyo.



Molten iron is poured into one of the two furnaces at the Basic Oxygen Steel Plant of CF&I's Pueblo Plant. After charging with scrap and molten iron, the furnace is tilted upright and oxygen blown onto the surface of the "bath." Each of the two furnaces pours approximately 100 tons of molten steel every hour.

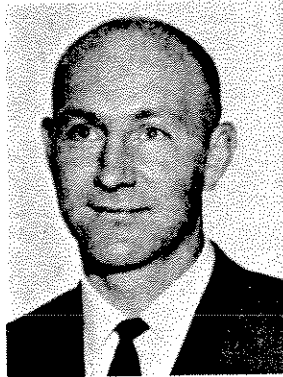


COLORADO CHAPTER INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS

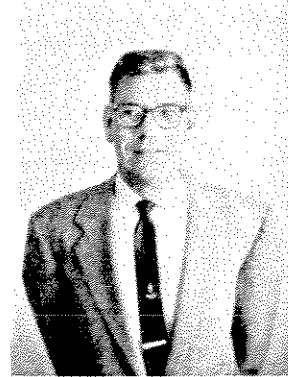
"UNIFORM BUILDING CODE"



Clayton Meyring
President
Chief Building Inspector
Boulder, Colorado



Thomas A. Briggs
Past President
Chief Building Inspector
City of Aurora, Colorado



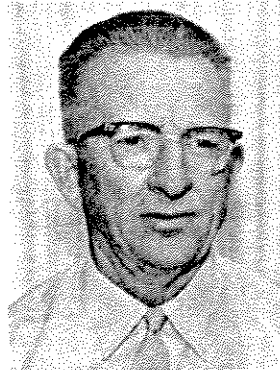
Dan Larimer
Building Inspector
Jefferson County



First Vice President
Ben Kinkel
Chief Building Inspector
Arvada, Colorado



Second Vice President
Louis Jay
Chief Plumbing Inspector
Denver, Colorado



Third Vice President
Leonard Owings
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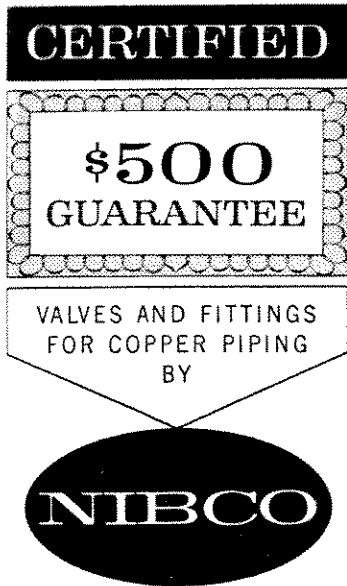
PRESIDENT'S MESSAGE:

As your elected president for the year 1963, I take this opportunity to show my appreciation for the privilege to serve an organization as active as the Colorado Chapter of I. C. B. O.

The Colorado Chapter is noted as one of the most active chapters in the Conference. This distinction is possible because of the efforts of its members sincerely seeking uniformity in administration and interpretation of building codes. Uniformity, a benefit to all, may some day be accomplished by building officials meeting regularly together, discussing mutual problems and every effort made toward solution of those problems.

Much progress has been made in the past and much work is necessary and planned for the future. I feel confident that the Colorado Chapter will have a very successful year in 1963, due to the unselfish efforts and cooperation of its members, committees and officers.

I sincerely thank the Colorado and Wyoming Building Officials for their loyal support.



The NIBCO valves and fittings used in this home are guaranteed to the original owner against defects in workmanship and material for a period not to exceed twenty (20) years. Our obligation under this Certified Assurance Policy shall be limited to the replacement of all NIBCO valves and/or fittings which are proven defective upon inspection at the factory. Policy is valid only if installation is a Certified NIBCO System, using all NIBCO valves and fittings, and has been registered within thirty (30) days after occupancy.

Under the terms of this policy, replacement valves and/or fittings shall be furnished to the original NIBCO contractor whose name appears on this policy or if such contractor is not available, then to a contractor approved by NIBCO INC. In addition, NIBCO INC. will pay for the cost of installing replacement valves and/or fittings in an amount not to exceed \$5.00 per valve or fitting and not to exceed \$500.00 total over a period of twenty (20) years.

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GREELEY BUILDING DEPARTMENT

Greeley, Colorado

Jim Robenstein — Director of Inspection

Greeley, already leading the Rocky Mountain area in per capita retail sales, continued to expand its facilities. The commercial valuation for 1962 was \$852,216, more than doubling the figures for 1961.

A slight decline in residential construction was more than offset by the commercial and industrial expansion. The total valuation of \$7,522,257 was approximately \$300,000 higher than the figure for 1961.

Mr. George Bargelt, Director of Inspection for most of 1962, is now with the International Conference of Building Officials in Pasadena, California. He was ably assisted in his duties during 1962 by Charlie Effeldt, Sr., Building Inspector; Ray Lovely, Electrical Inspector; and Don Martin, Plumbing Inspector.



PARTICIPANTS IN THE 1962 COLORADO CHAPTER ANNUAL SEMINAR

1962 SEMINAR

The Annual Seminar of the Colorado Chapter of International Conference of Building Officials was held on March 21, 22 and 23, 1962 at the Engineers' Building, 1380 South Santa Fe Drive, Denver, Colorado. This Seminar was sponsored by the Colorado Chapter, Colorado State University and Colorado State Board for Vocational Education. Mr. Walter J. Krstich, P. E., Director of the Denver Building Inspection Department was the Moderator.

The Honorable Richard Y. Batterton, Mayor of the City and County of Denver made the welcoming address at lunch on March 21st. The Honorable Steve McNichols, Governor of the State of Colorado was the speaker at the Annual Meeting Luncheon on Thursday, March 22. Mr. W. J. Shoemaker, Manager of Department of Public Works, City and County of Denver gave a short talk on March 21, his subject being Building Inspection.

The first day of the Seminar was devoted to "Blast and Fallout Shelters". Speakers on this very important topic were as follows:

Arnold Feldman, PHD, Assistant Professor of Radiological Physics, University of Colorado Medical Center, Denver

George Bargeldt, Chief Building Inspector, Greeley, Colorado

John Stone, P. E. Structural Engineer and Plans Checking Engineer, Denver Building Inspection Department

Don Wakefield, Structural Clay Products Institute

Ed Plass, Civil Defense Director, City and County of Denver

Bruce Randall, Director of Education, International Conference of Building Officials, Los Angeles, California

The second day, Thursday, March 22 the following was on the program:

Bruce Randall discussed various portions of the 1961 Uniform Building Code

Fred Gartz, Engineer, National Board of Fire Underwriters (New York) discussed "The Method of Fire Zones

Joe Antonio, Research Engineer, Denver Building Inspection Department showed 3 films from the Underwriters' Laboratories (Chicago)

A short address was given by the Hon. Steve McNichols, Governor of the State of Colorado

The Annual Meeting of the Colorado Chapter began at 2:00 P.M. presided over by President Tom Briggs, Chief Building Inspector, Aurora, Colorado

The Annual Banquet was held at 7:00 P.M.

The third day, Friday, March 23 was devoted to the following:

Bruce Randall continued with his discussion of the Uniform Building Code.

(Continued on Page 8)

1962 SEMINAR

(Continued from Page 7)

Carl Aikele, Chief Plumbing Inspector, Colorado State Dept. of Health discussed recent changes to the Colorado State Plumbing Code.

James McNally, Chief Building Inspector, Jefferson County, discussed recent proposed changes to the Colorado State Electrical Code.

Deputy Fire Chief, Cassio Frazzini, Denver Fire Department showed fire film.

Closing ceremonies were held at 4:00 P.M. and presentation of Certificates was given those who fulfilled the requirements of the Colorado State University and the Colorado State Board for Vocational Education.

WEDNESDAY, MARCH 21, 1962—

The first day of the Seminar opened at 7:00 A.M. with the serving of coffee and rolls prior to registration.

The Seminar began with an address by Mr. Joe Shoemaker, Manager of Public Works for the City and County of Denver. He welcomed the group in behalf of Richard Y. Batterton, Mayor of Denver stressing the point that this type of seminar was good for the public generally and for inspection personnel.

Mr. Walter Krstich, Director of the Building Inspection Department for the City and County of Denver and Moderator of the Seminar opened the meeting with a short address.

Arnold Feldman, PH.D., Assistant Professor of Radiology at the University of Colorado Medical Center in Denver, spoke on the effects of certain types of radiation. His talk included slides and blackboard work and the effects of either an atom or hydrogen bomb on the human

body. The talk was excellent and the group was quite impressed.

The next speaker was Mr. George Bargeldt, Chief Building Inspector of Greeley who spoke generally on Blast and Fallout Shelters including the thickness of walls, floors, roofs, decibel reduction within the shelter and touched on certain mechanical requirements. Mr. Bargeldt has just completed a two week course on Fallout Shelter Analysis held by the University of Colorado in Boulder and sponsored by the Office of Civil Defense. He explained the course in great detail.

The morning session then adjourned for lunch.

The first speaker of the afternoon session was Mr. John Stone, P.E. Structural Engineer for the Denver Building Department. Mr. Stone, who also attended the Shelter Analysis School in Boulder, spoke on the structural features in shelters limiting his remarks to fallout shelters only. He also talked briefly about the lack of code requirements for shelters and the need of close supervision of shelter construction by the building inspection departments.

Mr. Don Wakefield, Regional Director, Structural Clay Products Institute, continued the discussion of shelters, directing his remarks to blast and thermal effects on both underground and above ground shelters. His talk was supplemented by a nice presentation of slides, charts and blackboard diagrams.

A film on blast and bomb destruction was shown by the Office of Civil Defense, under the direction of Mr. Ed Plass, Director of Denver Civil Defense.

The speakers of the entire days program found it hard to condense the abundant amount of material into the short time allotted, consequently, only a few minutes were left for a panel discussion on shelters. The panel, composed of Feldman, Bargeldt, Stone, Plass and Wakefield, did find time to answer some very interesting questions asked by the group.

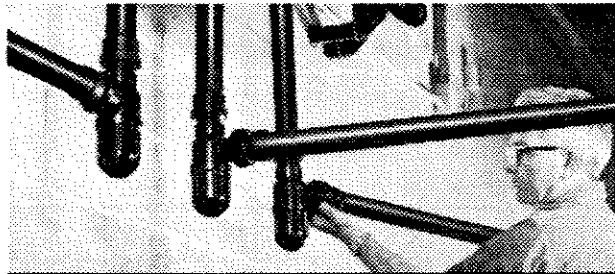
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30 New Industries Herald New Era For Loveland, Colo.

Loveland, Colorado's "Sweetheart City," is discovering a new way of life. After 80 years of peaceful prosperity as trade center for one of the West's richest agricultural areas, it has become in recent years the home of some 30 new industrial firms, employing 1500 workers who make products that annually exceed in value the region's agricultural output.

Many of these factories, such as the Great Western Sugar Co., Loveland Packing Co., and the U. S. Gypsum Co., use the wealth of natural products of the area. Others turn out a variety of goods ranging from orthopedic braces to prefabricated homes to the new tools of the space-electronics age. Examples of the latter are Scientific Electronic Products, Inc., dealing in frequency control quartz crystals, and the Hewlett-Packard Co., which manufactures electronic measuring devices. Hewlett-Packard in 1962 employed 350 persons, and plans to expand to four times this number within 5 years.

Most of the new plants are located in one of Loveland's two industrial parks, developed by the Loveland Development Fund, Inc. A third, 100-acre site, the Turner Industrial Area is under development now.

While the availability of choice sites has been a key to Loveland's industrial growth, other factors have contributed greatly. For example:

1. **WATER AND POWER.** Loveland is a prime beneficiary of (and headquarters for) the Colorado-Big Thompson Project, a federal water diversion development which gathers enough water from Colorado's Western Slope to meet the needs of 1,000,000 people. This project also makes available virtually unlimited supplies of electrical power, when coupled with the resources of the Public Service Co. of Colorado. Power is so plentiful that for years the

city's municipal light plant has provided free electricity to light all residential porches at night. Loveland police believe this has been instrumental in keeping Loveland's crime rate far below the national average for cities of its size.

2. **TRANSPORTATION.** Loveland is located on U. S. Highways 287 (north-south) and 34 (east-west). Its railroads, the Colorado & Southern and the Great Western, provide quick and easy access to nearby transcontinental rail systems. There is daily truck service to and from Denver and surrounding towns. A 324-acre site is being developed as a new municipal airport.

3. **LABOR MARKET.** Loveland's own population, now estimated at 11,000, contains a substantial pool of both skilled and unskilled workers who have moved to Loveland in search of good living conditions. A million more persons live within 60 miles of Loveland.

4. **LIVING CONDITIONS.** Loveland is located in the heart of one of the nation's great scenic and recreational areas. Only 30 miles from the West's prime mountain playground, Rocky Mountain National Park, Loveland is visited annually by nearly 1,000,000 persons, moving to and from the mountains. Loveland has a new municipal golf course and a free municipal swimming pool. Lake Loveland, one mile square, is inside the city limits. It's excellent for boating, water skiing and fishing. Thousands of miles of fishing streams, and hundreds of lakes, abound in the area. Situated just east of the high Rockies, a mile above sea level, Loveland has a dry, temperate climate, marked by mild winters and cool summers. Its already-excellent public school system is being improved constantly (voters recently approved a new \$3,250,000 bond issue for further school construction), and its high school graduates can attend any one of six major colleges and universities located in a radius of 60 miles.

Loveland is so attractive that, in the past three years, 200 new businesses have located in Loveland, 25 new business buildings have been constructed, and 61 existing firms have expanded their establishments.

JEFFERSON COUNTY

New faces in the Department this year include, J. D. Reeve, plan checker, Karen Liechti, filing department, Helen Cornelison, front office, John Steinberg, plumbing inspector and Norman Frisbie, heating inspector.

This department feels justifiably proud to have issued approval for the use "Sarabond" in the first application in a residence in this territory. Sarabond has been used in the Parade of Homes in the all brick house and was accepted as the outstanding house in the Parade. This department reviewed the application of this new material and feels that there is a complete new concept of brick usage with this new mortar.

Three of our department members have become Grandfathers this past year, John Steinberg, and Wymer Dixon. Dan Larimer, plan checker, is the proud grandfather of twins.

The Jefferson County Building Department has acquired a new look. In order to expedite issuing permits and generally step-up the tempo of processing, a new counter has been added and all personnel operate in a quieter atmosphere. This tends to allow work to proceed without the push and confusion of having the public wandering out among those responsible for processing permits.

A new private office has been built for Mr. Earl Sivers, the Chief Technical Building Inspector. It has been built back in a corner, where he can't bother any one and allows the office to function without interference. This arrangement affords privacy for him without interruption.

The Board of Review has a new member, Mr. Tatum, from District #3, which includes most of the Mountain Area. He is a builder with many years of experience and has proved to be a worthy member. A large room has been set aside for a conference room and it appears that this arrangement will make a satisfactory permanent meeting room that can be utilized for many other needs. Over all, the re-arrangement of the department seems to be functioning very well with more and better things to come.



EARL SIVERS
Chief Building Inspector Jefferson County

The Building Departments welcomes the experience and "know how," of their new Chief of the Lakewood Fire Department, Mr. Emmett Schmidt, and the new Chief Engineer of the R-1 School District, Mr. Chaney. They have shown a willingness to assist us in any way possible to work towards better buildings with the least possible conflict between departments interested in the same end result.

All the members of this department who attended the annual School in Denver, have received their awards and Dan E. Larimer successfully passed the examination after completing a course in radio-active detection. The

(Continued on Page 33)

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PART I

AN INTRODUCTION TO PUBLIC RELATIONS

There are many definitions of public relations, as put forth by numerous authorities. One definition, short and to the point, "Relations with the public." Another definition, as applied to government, "No less than the sum total of all the contacts, attitudes, impressions and opinions that constitute the relationships between the public and its government." Another author sums it up by stating: "The ideals and objectives of public relations are (1) to know ourselves and those around us, (2) to understand our relationships with our fellow men, (3) to guide our conduct so that those relationships will be more enjoyable and beneficial to ourselves as well as others."

One of the most popular distortions of the concept of public relations is to think of the program as consisting chiefly of high pressure publicity. This is not correct. The distinction between publicity and such a program lies in the scope of the two terms.

The public relations program is concerned with the shopping of policies and practices which, if sincerely effected and made known to the public, will result in good will.

Publicity then is merely one of the media through which the policies and activities of an institution are presented to the public.

Certainly, the prime purpose and object of such a program is to improve the relationship between the city government and the public. A good relationship is said to exist when the public attitude toward the city government is one of confidence, respect and approval.

It is known, both by definition, and its objectives, that the city is trying to improve the relationships between the city government and the public. The program for such improvement must then be broad enough in its scope to embrace all the factors affecting the relationship. What are these factors?

- (1) **Policies of the City Government.** These policies are generally made and found in the various city ordinances, resolutions, regulations, and orders. Good relations cannot exist if these policies do not meet with the general approval.
- (2) **Competence and Efficiency of the City Administration.** This factor has a direct effect, in that the public reacts either favorably or unfavorably with the city government, depending whether the government carries on efficiently and economically, or vice versa.
- (3) **Public Knowledge and Understanding of City Government Activities.** Public reporting and publicity are an essential part of a good public relations program.
- (4) **Personal Contacts between the Citizen and Public Employee.** This applies both to face-to-face contacts and to indirect contacts, through correspondence or by telephone.

Employee Contacts with Citizens. The importance of personal contacts between the citizen and employees cannot be stressed too strongly. The city, as an institution, or the policies of the city as such, do not make a very definite impression upon most citizens. It is not until the citizen has contact with some representative of the city that the city government becomes a reality. It must be remembered that in every citizen-official contact, the employee is representing the city. **What the employee does and how he does it** are therefore of vital importance to the public relations program.

In every city government there are various types of inspectors. Fire, health, license, miscellaneous and plumbing inspectors. These inspectors are in direct contact with the public. Their appearance, manner of treating the citizen and the ability to explain the why of the service of their department have a direct bearing on public relations.

Since most inspections are carried on by municipal employees on private premises, it is particularly important that the rights and feelings of the citizens be given consideration.

Whenever possible, inspections should be made at hours that will be most convenient for the citizens being given consideration.

Whenever possible, inspections should be made at hours that will be most convenient for the citizen. Special care should be given to provide inspectors with identification cards or other evidence of their official status.

One of the most frequent methods of contact is by the telephone. How these calls are handled is an important public relations consideration. First, consider the physical facilities such as trunk lines. An insufficient amount of these lines will cause many busy signals. The city's equipment should make it possible for a citizen to reach the City Hall quickly and easily.

When answering the telephone, the salutation is important. The name of the department and the persons answering should always be given. All conversations should be brief and to the point. Business telephones should not be used for personal calls.

Handling Inquiries and Complaints.

The responsibility of handling citizens should be clearly assigned. This is a pre contact consideration.

The contact itself depends on three factors. Namely, the manner of the city employee, his knowledge of city affairs and his ability to impart that knowledge in such terms as the citizen will understand. In the manner of the contact, the employee will depend in part upon his own personality and his interest in public relations. The knowledge of the

Continued on P.

Synopsis of Colorado's Industrial Growth

The continued growth of Colorado's industrial economy, which came to the fore front immediately following the end of World War II, remains the favorite topic of numerous economists. Educated comments and guesses are constantly being written as to what has caused the industrial growth, will the growth continue, dangerous pitfalls that appear, and any number of "after-the-fact" educated guesstimates.

Accepted statistical facts do indicate that not only has Colorado enjoyed an envious industrial growth during the 1940 and 1950 decades, but current information from the United States Department of Commerce indicates that as we move into the 1960's this growth is continuing in a very healthy manner.

Colorado's population increased a booming 32.4% from 1950 to 1960 and educated forecasting estimates indicate this increase to continue by another 30% by 1970.

Total personal income in Colorado increased 21.1% from 1958 to 1961. The national average for the same period was only an increase of 15.8%. It is also interesting to note the comparison of Colorado with the national picture on some of the major sources of personal income for this same period. Wages and salaries in Colorado increased 27.3%, compared to the national average of 16.6%; personal income from manufacturing increased in Colorado by 39.9%, whereas the national average increase was only 14.0%; personal income from the wholesale and retail classification had a 24.9% increase in Colorado, compared to the national average increase of 16.1%.

Per capita income for Coloradan's showed a healthy increase in 1961 of 15.2% over 1958. The national average per capita income increase from the same period was only 9.6%.

The above statistical picture casts an interesting reflection on the dollar buying market. During the same period, using unadjusted figure, retail sales in Colorado rose by 4.6% while the national average retail sales rose only 1.6%. Also, wholesale trading in Colorado increased 9.5% in 1961 over 1958 while the national average increased only 2.3%.

Population gains show how much we have grown—per capita personal income how well we have grown—population plus income constitutes the Colorado market.

Moving on to other important economic indicating barometers, Colorado employment in non-agriculture industries in 1961 showed a 12.9% increase over 1958, while the national average increase was only 7.0%.

Using "value added by manufacture" as an index of growth, industrial activity in the United States increased by some 20% between 1954 and 1958, as compared to Colorado's gain of 61.6%. Although 1958 is the latest year official Census of Manufacturers data is available, other indicators, such as employment in manufacturing, continue to expand. By 1961, employment in Colorado manufacturing increased by 21.2% over 1958. The national average gain during this same period was only 5.2%.

Since the beginning of 1960, there has been over 250 new plants and major expansions in Colorado constituting private industry's optimistic investment in the future of this state with an industrial capital investment of well over \$100-million.

Among these new industries and major expansions in Colorado are such well known national concerns as Sundstrand, engaging in research and development of missile and space vehicle power systems; Minneapolis-Honeywell, developing and manufacturing scientific instruments, magnetic tape recording systems and photographic equipment; The Martin Company, producing and testing titan missiles; Triplex, producing automotive pistons; Beech Aircraft, researching cryogenic and high temperature engineering; Esquire-Magazine, subscription fulfillment for national magazines; Dow Chemical, doing

contract work with the Atomic Energy Commission; Kaman Aircraft, doing research in advanced weapons systems; Hewlett-Packard, developing and manufacturing oscilloscopes, oscillators, voltmeters, power supplies and audio-video devices; Western Electrodynamics, developing and manufacturing instruments, scientific apparatus and other electronics; A.R.F. Products, research and development of electronic devices; State Farm Insurance, regional insurance office; National Center for Atmospheric Research, research relating to all phases of the earth's atmosphere and the effects of the sun upon it; Burroughs, systems hardware contractor for U. S. Air Force; Gould National Batteries, producing automotive batteries and filters; Ultronix, manufacturing electronic resistors; Coors Porcelain, developing and manufacturing propulsion nuclear fuel elements; Ball Bros. Research, research in electronic and geophysical equipment; Gates Rubber, manufacturing tires, belts, hose and mechanical rubber goods; National Cash Register, training facility for repair and maintenance of electronic equipment; Colorado Fuel and Iron, manufacturing steel and steel products; National Bureau of Standards, research in radio science and in low temperature engineering; and others.

Space age industries, consisting primarily of electronic firms and research and development laboratories, have sparked the state's continued industrial growth.

In the field of education and research facilities, Colorado also has much to offer industry. Of Colorado's graduating high school seniors, 42% are enrolled in accredited colleges and universities and based on the latest data available, the proportion of Coloradans completing four or more years of college, are among the highest in the nation.

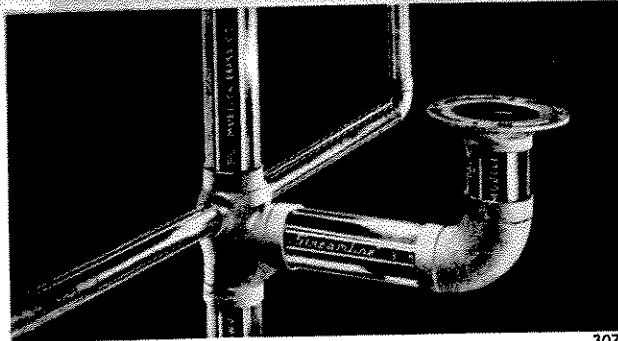
There are 12 four-year colleges and universities in Colorado. Some of which are gaining national reputations in their performance of basic and applied research in a wide variety of technical areas for industry and government. These include the Colorado School of Mines, Colorado State University, University of Colorado, University of Denver, U. S. Air Force Academy, and others.

In addition to the large number of schools preparing students for college, there is an increasing number of trade schools throughout the state, as well as 7 Junior Colleges, that offer vocational courses in support of the existing and potential industry in their area.

Testimonials of Colorado firm executives support the growing importance of the living condition factor in a firm's ability to successfully recruit and hold technical personnel as well as engaging diligent, industrious workers who can readily adapt themselves to the manufacturing techniques required by the firm.

We cannot help but make favorable predictions for Colorado's economic future. We firmly believe the Colorado growth horizon is clear. We can see no visible clouds, barring national discontinuity, that might slow our continued growth during the decade of the 1960's.


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AN INTRODUCTION TO PUBLIC RELATIONS

Continued from Page 15

affairs may come from experience or through special preparation. The ability to impart information in the layman's language is important.

Complaints are warning signals that call official attention to errors or omissions in the city's service program. If given prompt and careful attention, the city may be able to render even better service to the public. These complaints can be divided into four special considerations.

- (1) **Receiving of Complaints.** Here the attitude of the employee receiving the complaint is of critical importance. The citizen filing the complaint is seldom in the best of temper; to him it is a matter of real importance. Do not argue with him, take his complaint.
- (2) **Investigation and Correction.** As soon as the complaint is received, it should be referred to the right person for immediate investigation. If, upon investigation, it is found that the complaint is unfounded or unjustified, a written report should be made. If a complaint is found to be justified, and is quickly corrected, it will prove to be a public relations asset.
- (3) **Follow-up Procedure.** Some system should be set up to make certain that complaints are promptly and thoroughly treated. This is

a departmental function that is very necessary.

- (4) **Notification.** The final step is to notify the citizen as to what action has been taken. In some cases no formal notification is required. However, the complaint may be transferred from a public relations liability to a public relations asset by informing the citizen of the action taken. This can be done by a letter, telephone call or personal contact. Whatever time or expense may be entailed in these various forms of notification will be amply returned in improved public relations. Up to this point the city government has been on the defensive, apologizing for mistakes or explaining reasons for actions resulting in complaints. With this notification, the city now assumes a positive role.

Physical Appearance and Public Relations. Any comprehensive public relations program must be concerned with appearance. No one can see a city government, but people can see city employees, buildings and equipment. What they see often determines what they think. City officials, concerned with improving the public relations of their city, could well take a "citizen's-eye" view of their government.

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Boulder



City of Aurora

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In the year of its founding (1890), the City of Aurora, then called Fletcher, was not considered to be a suburb of Denver. It was one of a group of satellite cities which resulted from real estate speculation. In its first days the city limits included four square miles, 21 buildings and 36 residences. The silver panic in 1893 hit Colorado hard, and Aurora along with it. Around the turn of the century, agriculture and cattle ranching tended to help stabilize the economy. By the first World War, the city had grown to a population of 900 people. Much of Aurora's growth can be greatly attributed to Military installations in and near the city.

In 1918, Fitzsimons General Hospital was established at the east boundary of the city. Today this hospital is the largest of its kind in the country. A population rise during the '30's to 3437 was quite promising for Aurora in the face of the great depression. By the end of the decade, the Denver metropolitan area had become an important trade center and service metropolis for a large region.

In 1928, Lowry Air Force Base was established just southwest of Aurora, they are celebrating their silver anniversary as a primary training school for Air Force personnel this year. During World World War II, as many as 20,000 service men were stationed here. In 1942, the Rocky Mountain Arsenal was established just north of Aurora, employing many thousands, manufacturing chemical warfare products. Buckley Naval Air Station was established two miles east of Aurora the same year. Many armed forces personnel that had been stationed in the Aurora area returned after the war. The growth rate shot upward immediately. Recent installation of Titan Rockets in an area several miles of Aurora has greatly influenced the economy of Aurora and has added to its growth.

In addition to the tourist business in Aurora, two other primary industries are prominent in the city's economy. Namely the Wright & McGill Company, manufacturers of the well known Eagle Claw fish hooks and other fishing equipment and Stanley Aviation, producers of the Escape Capsule for the B-52 Supersonic bombers. The two companies employ several hundred Aurora citizens.

Many people in Aurora work within the City of Denver, particularly at the City of Denver Airport, which schedules seven major air carriers with many of their employees located in Aurora.

Aurora's growth rate in the last ten years has been phenomenal, more than doubling its population to over 50,000 and in the last two years it has

more than doubled its area. The city's home building and construction industry are adding more than 1500 new residential units to the city each year.

The city government is of the Council-Manager form. Eight councilmen are elected bi-annually, four from wards and four from the city at large. A mayor is also elected bi-annually by the voters, making a total of nine councilmen. The present mayor is Henry W. Allard.

The city manager appointed by the city council is Robert O. Wright, who acts as Chief Executive and Administrator for the city.

Primary source of revenue is from real property taxes. The city's annual budget exceeds three million dollars. The city operates a very modern sewage disposal plant of the Hy-Cone aeration type, the only one of its kind municipally operated in the state of Colorado. A sewage treatment plant of the same type will be built in 1965. The city has undertaken a joint water development and expansion program with the city of Colorado Springs, known as the "Homestake Project" which will bring water from the western slope. Estimated cost of this expansion is \$38,000,000.

The city's expanding population has caused an over load on the present building accommodations and it is presently involved in planning municipal building additions together with a new library. Its citizens have also felt the need for additional hospital services and are organizing a hospital district for its construction.

The Building Department operates under the Director of Public Works, Robert A. Black. Tom Briggs is the city's Chief Building Inspector. The Building Department enforces the following codes adopted by the city council: The Uniform Building Code, National Electrical Code, Colorado State Plumbing Code and the City of Denver Gas & Heating Codes. In addition to these regulations, all city contractors are required to be bonded.

Because of the rapid rate of growth, the Building Department has recently increased its inspection staff. The staff includes: 200 Inspectors, Chief Building Inspector and nine field inspectors of various specialties. The department received 1960 permits for 1961 Gas & Heating codes for 15,000,000 dollars, 1962 individuals of home work amount to 10,000,000 city's construction industry.

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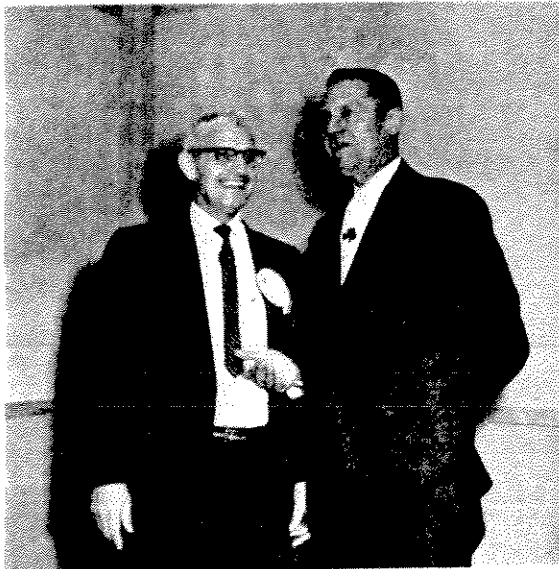
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The answer is simply—NOTHING!

Very few organizations do anything for their members that the members cannot do for themselves. Take yourself for instance.

You don't need an organization to write a building code for you. Every inspector can write a code if he takes the time, money, and has enough reference books.

You don't need an organization to get the city to accept a building code. Any inspector can individually propose to the city that they accept his building code. It just takes money to prepare it and time to present it; time to discuss it and time to revise it.

You don't need an organization to work for favorable national legislation. Every inspector can do that by writing, wiring and talking to his Congressman or taking nine or ten trips a year to Washington.

You don't need an organization to change public opinion about the inspector. Every inspector can do that by the way he conducts himself, the time he spends on civic enterprises, his help and contribution to worthy causes.

Of course if you don't have the time, money and experience, "know-how" and desire to do all this, **MAYBE YOU DO NEED AN ORGANIZATION.**

What the Research Services of the

International Conference of Building Officials

Can Do For Your Product

Provides a Service to Cities and Industry

NEW PRODUCTS, NEW MATERIALS and types of construction not covered by the regulations of the Uniform Building Code, receive special attention from the Building Official under Section 105 of the Code.

In enforcing this section of the Code, the Building Official is confronted with a problem of considerable magnitude to review design data, test reports and other information in evaluating such new materials. Here the Conference steps in to assist the Building Official by offering specialized services of qualified structural and civil engineers who study and report on the subjects presented for consideration under a well-organized plan. The technical directors of this non-profit service organization are registered structural engineers, and members of the Research Committee of seven building officials also hold engineering licenses. In this way the Building Official has the advantage of many years of combined technical and practical experience.

Provides Yearly Re-examination

YEARLY-RE-EXAMINATION assures maintenance of the standards of manufacture or fabrication of the product as specified and set forth in the original report.

Yearly re-examination keeps the product constantly before the Building Officials in cities operating under the Uniform Building Code.

Provides a Listing Service

LISTING IN BUILDING STANDARDS MONTHLY of the report on the product by category highlights the

300 products now specifically recommended for approval under Section 105 of the Uniform Building Code.

Listing in Building Standards Monthly is the least expensive advertising the company can secure on a sustained basis. The magazine has a circulation of over 2,000 and has as many as four readers in each member city—the building inspector, the city engineer, the city manager and the superintendent of the public works, which in effect more than doubles the circulation.

Promotes Uniformity

ACCEPTANCE OF THE REPORT on a product by 95 per cent of the Building Officials in cities operating under the Uniform Building Code gives uniformity in Code enforcement in all of these cities and recognition of the approval of the product at the same time. When approval of the Research Committee is authorized, reports are circulated to member cities in 42 states at a cost to the proponent of about 40 cents per city for new reports and 30 cents per city for re-examinations. In addition the reports are circulated to nonmember cities operating under the Uniform Building Code.

Represents Financial Advantage

ISSUANCE OF THESE REPORTS has eliminated the need for the proponent to send representatives to contact and obtain approval from each Building Official in the 1,200 cities operating under the Uniform Building Code. This results in a financial benefit to the proponent, in many companies amounting to thousands of dollars.

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Colorado Springs Building Inspection Department

Perry C. Tyree, Superintendent of Building

The Building Inspection Department in Colorado Springs as with many other cities in this region experienced an unprecedented increase in building construction in 1962 by topping all previous records with a whopping big 24.5 million dollar construction bill. Almost 60% of this amount fell in the category of dwellings (13.1 million) but 2 million dollars worth of hotels and 3.3 millions in office buildings helped bolster the total. The previous high record was in 1959 with 20.5 millions.

With continued building boom in the Pikes Peak Region, this department has been forced to expand to larger and more modern facilities in the remodeled City Hall lower floor. At the time of this writing, these new facilities are under contract and our new headquarters should be ready for occupation about April 1.

Construction of a major nature is changing the general landscape. The Air Force Academy Stadium is complete, bringing "big time football" to the region, the "LITTLE PENTAGON" of the NORAD installation is under construction to be complete this year and construction contracts are being advertised for completing the underground defense operations in Cheyenne Mountain for the North American Air Defense Command. The demands on this community due to this construction have been instrumental in the large dwelling demands of the community and like all communities - GROWING. Let us PAINs but also PROGRESS AND PROSPERITY.



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ACTIVITIES OF THE INDUSTRIAL COMMISSION OF COLORADO



RAY BRANNAMAN

The erection of safe structures, proper renovation and maintenance of existing buildings, and good public relations through uniform inspections—these are the aims of the Colorado Industrial Commission, Division of Safety Inspection.

In this respect, the goals of the State agency positively parallel the purposes of the International Conference of Building Officials, Colorado Chapter. And, this common bond has produced in a few years lasting, mutual benefits.

The six members of the Safety Inspection Division have been active members in this organization. Ideas exchanged in meetings and discussions have been of definite

value in application of the agency duties.

Responsibilities of the Division, which are set by Statute, involve inspection of all places of public assembly, schools, institutions, industries, factories, stores, hotels, theatres and establishments where workers are hired or machinery used.

In addition to the Safety Inspection Division, the Industrial Commission administers the following agencies and departments:

State Compensation Insurance Fund, Workmen's Compensation Act, Labor Relations, Boiler Inspection, Wage Claims, Women's Wage-hour Law and Child Labor Law, Safety Education, Migratory Labor, Colorado Apprenticeship Council, Private Employment Agencies, Division of Unemployment Compensation (ex-officio).

Authority to conduct this complex of activities is vested in a three-member Commission. No more than two of these members shall belong to the same political party. Each is appointed by the governor, with the advice and consent of the Senate. No more than one of the appointees shall be classed, by previous employment or affiliation, as a representative of employers, nor shall more than one of the appointees be classed as a representative of employees.

The staff of the Industrial Commission includes Ray H. Brannaman, chairman, Walter W. Johnson and an appointee to be named by the governor. Frank G. Van Portfliet ends this year a six-year term as commissioner.

The present staff of the Safety Division comprises Art Becker, director; Thomas C. Epton, senior inspector; and Inspectors James Evans, Myron Williams, Mel Woertendyke and James C. Williams.

In order to better accomplish its objectives, the Division has adopted various codes and standards, and has found that many city and county levels of government officially have followed this procedure, thereby facilitating better planning consistent with regulations.

Among those adopted are the American Standard Safety Codes, Accident Prevention Manual for Industrial Operations, Safe Practices and Health Practices, Building Exits Code No. 101, National Electric Code and the Uniform Building Code.

Using these standards as guidelines, the Division completed in the biennium period ending last June 30 more than 8,500 inspections of

places delegated to its responsibility. These inspections resulted in written issuances of 2,258 individual orders for industry listing 5,529 items in violation, and 898 orders for schools containing 3,311 items. Certificates of inspection were issued to 4,030 places which had complied completely with all regulations.

All of these inspections were of a more thorough and time-consuming nature than in the past, due to a Division innovation which will result in bringing up to date all previous non-compliance orders and thereby providing a four-year consolidated record of inspections.

Another service which has grown considerably in popularity is the review of plans and specifications presented by architects for approval of safety factors before bids are let for construction. This has proven very beneficial to both the Industrial Commission and members of the profession, allowing necessary corrections to be made in advance and obviating the need for costly alterations at a later date.

More time and effort also was expended in field inspections in behalf of the U. S. Department of Labor, Wage-Hour and Public Contract's Division. At the request of federal authorities, the Inspection Division checks buildings and premises of government-contract jobs, and safety factors must be approved before federal sanction of work performance will be issued.

This activity produced a U. S. Department commendation that the Colorado safety program ranks among the top of the various states.

Currently, the Inspection Division is following a practice of prompt, on-the-spot investigations of complaints about work conditions and the lack of safety facilities on job sites. Both management and employes have praised this procedure, which has resulted in alleviating serious conditions and forestalling possible future mishaps.

These checks revealed that there is an increase in the number of complaints from construction jobs, centering around the non-use of both mechanical and personal safeguards. Reflecting these complaints, too, is the fact that 51 of the 226 fatal on-the-job deaths recorded in the biennium ending June 30, 1962, were in the construction field.

Particular attention also is being given by the Inspection Division to the installation of fire detection and fire protection systems. This emphasis on fire alarm apparatus is being received favorably, in keeping with both ICBO and Industrial Commission objectives.



JIM EVANS



MYRON WILLIAMS



ART J. BECKER



MEL WOERTENDYKE

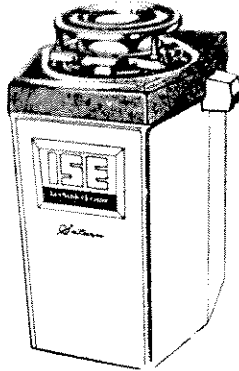


Picture and Article on
Frank G. Van Portfliet, Page 39



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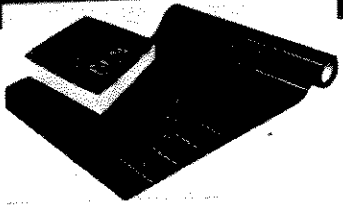


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Laramie is the county seat of Albany County, Gateway to the Snowy Range, and Home of the University of Wyoming. Located 7,165 feet above sea level in the south-east corner of Wyoming between the Laramie Mountains and the Snowy Range, Laramie has a population of 19,000 in the metropolitan area and has a City Manager form of Government. The University of Wyoming has over 4,300 students and 300 full time faculty members.

Surrounded by mountain ranges relaxing in cool summers, Laramie has been favored with natural recreation areas accessible to the public. Excellent deer and antelope hunting and trout fishing in lakes and streams are in a 30-mile radius and during the winter, two ski areas provide for the skiers' needs.

Laramie attracted international attention with its first woman jury in 1890.

Laramie's early growth depended upon the railroad, cattle, sheep and horse ranches, tie camps and mining enterprises.

Laramie has never been a boom town, nor has it suffered a really severe setback, but has grown steadily in population and municipal services since 1868.

Laramie has a Building Department consisting of the City Engineer, Building Inspector, Electrical Inspector and Plumbing Inspector.

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COLORADO CHAPTER INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS

HOSTS:

WALTER J. KRSTICH, Director,
Denver Building Inspection Department

ARTHUR J. BECKER,
Director of Safety Inspection,
Colorado State Industrial Commission



ANNUAL SEMINAR AND MEETING

Dates: Wednesday, Thursday, Friday, March 27, 28 and 29, 1963
Place: Engineers' Building, 1380 South Santa Fe Drive, Denver, Colorado
Sponsors: International Conference of Building Officials, Colorado Chapter
 Colorado State University
 Colorado State Board for Vocational Education
Parking: Engineers' Building Parking Lot
Transportation: Broadway Street (No. 3 Bus) or Taxi
Meals: Engineers' Club (Breakfast, Lunch and Dinner)—Open at 7:00 A.M.
Lodging: Motels within walking distance of the Engineers' Building
Registration: 7:00 A.M. to 9:00 A.M., Wednesday, March 27, 1963 (No Fee)
Eligible to Attend: All members of Colorado Chapter
 City Managers, Mayors, Councilmen, Fire Departments, Building Officials, Health Officials and Building Code Enforcement Officials of the States of Colorado, Wyoming, New Mexico and Nebraska Architects and Engineers
Annual Meeting: Thursday, March 28, 1963—2:00 P.M., Engineers' Building

5:00 to 6:30 P.M. Cocktails
 6:30 to 8:30 P.M. Dinner
 8:30 P.M. Entertainment

FRIDAY, MARCH 29, 1963

Moderator—Perry (Pete) Tyree

7:00 to 8:00 A.M. Registration—Coffee and Rolls
 8:00 to 10:30 A.M. Bruce Randall Uniform Building Code
 10:30 to 10:45 A.M. Coffee Break
 10:45 to 1:00 P.M. J. L. Antonio Alternate Materials and Methods
 Jack D. White
 1:00 to 2:00 P.M. Luncheon
 2:00 to 3:00 P.M. Joe McCartin Acoustical & Ventilating Tile
 3:00 to 3:15 P.M. Coffee Break
 3:15 to 3:45 P.M. Presentation of Certificates
 3:45 to 4:15 P.M. W. J. Krstich Closing Remarks
 Arthur Becker
 4:30 P.M. Adjournment

WEDNESDAY, MARCH 27, 1963

Moderator—Walter J. Krstich

7:00 to 9:00 A.M. Registration—Coffee and Rolls
 9:00 to 9:15 A.M. W. J. Krstich Opening Remarks
 Arthur J. Becker
 Hosts
 9:15 to 11:00 A.M. E. B. Waggoner Earthquake—Panel Discussion
 Rev. Joseph V. Downey, S.J.
 J. T. Eaton
 Bruce Randall
 11:00 to 11:15 A.M. Coffee Break
 11:15 to 1:00 P.M. Resume Panel Discussion
 1:00 to 2:00 P.M. Hon. R. Y. Batterton Welcoming Address—Luncheon
 2:00 to 3:00 P.M. (N.L.M.A.) Wood Construction Data
 Rod Buchan
 Norman Reece
 3:00 to 3:15 P.M. (N.L.M.A.) Movie
 3:15 to 3:30 P.M. Break
 3:30 to 5:00 P.M. Wood Construction Data

THURSDAY, MARCH 28, 1963

Moderator—Charles Carter

7:00 to 8:00 A.M. Registration—Coffee and Rolls
 8:00 to 10:30 A.M. Bruce Randall Uniform Building Code
 10:30 to 10:45 A.M. Coffee Break
 10:45 to 1:00 P.M. Robert Kelly Complaints and Court Procedures
 1:00 to 2:00 P.M. Hon. John A. Love Address—Luncheon
 2:00 to 5:00 P.M. Clayton Meyring, President Annual Meeting—
 Colorado Chapter

HONORED GUESTS

JOHN A. LOVE, Governor of the State of Colorado
RICHARD Y. BATTERTON, Mayor of the City and County of Denver
RAYMOND BRANNAMAN, Commissioner, Colorado State Industrial Commission
WALTER JOHNSON, Commissioner, Colorado State Industrial Commission

ROSTER OF SPEAKERS AND HONORED GUESTS

WALTER J. KRSTICH, P.E.—Manager of Public Works and Director of building inspection Department, City and County of Denver
ARTHUR J. BECKER—Director of Safety Inspection, Colorado State Industrial Commission
JOSEPH L. ANTONIO, P.E.—Research Engineer, Building Inspection Department, City and County of Denver
ROD BUCHAN—Building Code Consultant, National Lumber Manufacturers Association, Arcadia, California.
CHARLES CARTER—Building Official, City of Boulder
REV. JOSEPH V. DOWNEY, S.J.—Director of Physics Department, Regis College, Denver
JERRY B. EATON, Ph.D.—Geophysicist, Crustal Studies Branch, U. S. Geological Survey, Denver.
ROBERT KELLY—Asst. City Attorney, City of Denver
JOE McCARTIN—Armstrong Cork Company, Denver
CLAYTON MEYRING—Chief Building Inspector, City of Boulder
BRUCE RANDALL—Director, Field and Education, International Conference of Building Officials, Pasadena, California
NORMAN REECE—Technical Representative, National Lumber Manufacturers Association, Denver
PERRY (PETE) TYREE, P.E.—Supt. of Buildings, City of Colorado Springs
EUGENE B. WAGGONER, P.E.—Woodward-Clyde-Sherard & Associates, Denver
JACK D. WHITE, P.E.—Asst. Director, Building Inspection Department, City and County of Denver

Denver Sets New Record For Valuations: \$132,000,000 — 1962

REPORT OF BUILDING INSPECTION DEPARTMENT, CITY & COUNTY OF DENVER, FOR THE MONTH OF DECEMBER, 1962 AND FINAL FOR 1962

TYPE OF WORK AUTHORIZED	NUMBER OF PERMITS		NUMBER OF UNITS		DOLLAR VALUATION	
	THIS MONTH	YEAR TO DATE	THIS MONTH	YEAR TO DATE	THIS MONTH	YEAR TO DATE
NEW CONSTRUCTION—RESIDENTIAL						
One-Family Dwellings						
Masonry	0	8	0	8	\$ 0	\$ 132,300
Frame	0	7	0	7	0	64,683
Brick Veneer	38	860	38	844	695,109	14,540,432
Sub Total			38	859	\$ 695,109	\$ 14,737,415
Two-Family Dwellings						
Masonry	0	30	0	15	0	203,743
Frame	10	164	5	82	47,300	1,003,410
Apartment Buildings	195	1858	10	122	759,346	9,862,381
Hotels	0	0	0	0	0	0
Motels	0	304	0	4	0	615,400
Total	243	3231	53	1082	\$ 1,501,755	\$ 26,422,349
NEW CONSTRUCTION—OTHER						
Industrial Buildings			2	41	513,900	2,546,314
Office Buildings			7	81	724,940	14,719,600
Commercial Buildings			2	55	27,591	2,015,889
Public Buildings			0	4	0	143,000
Medical Buildings			0	11	0	5,424,078
Educational Buildings			0	2	0	1,000,000
Recreational Buildings			0	2	0	29,000
Religious Buildings			0	9	0	535,540
Service Stations			0	13	0	116,834
Commercial Garages			0	3	0	56,483
Private Garages			21	708	39,895	1,145,255
Swimming Pools			1	51	5,000	235,081
Other			11	62	8,814	25,999
Total			44	1042	\$ 1,320,142	\$ 27,993,073
ADDITIONS						
Residential	+9	+9	72	2251	87,189	2,693,220
Other			24	500	1,068,195	21,520,387
ALTERATIONS						
Residential	+4	+4	47	792	53,345	1,682,113
Other			55	638	248,303	3,176,101
REPAIRS						
Residential			23	524	17,595	309,001
Other			18	171	27,517	432,861
Total	+13	+13	239	4876	\$ 1,502,144	\$ 29,813,683
DEMOLITIONS						
Residential	-46	-704	44	555	56,718	389,500
Other			22	231	33,349	279,934
MOVING						
Residential	-62	-62	5	52	7,500	63,733
Other			2	33	275	11,120
Total	-62	-62	73	871	\$ 97,842	\$ 744,287
Total Gain Dwelling Units	191	2478				
TOTAL CONSTRUCTION PERMIT NO. 1			409	7871	\$ 4,421,883	\$ 84,973,392
GENERAL PERMIT NO. 2						
Fences, Barricades			40	1190	\$ 27,077	\$ 438,086
Antenna			1	8	150	1,700
Roofing & Siding			171	4305	52,916	1,396,311
Insulation			0	43	0	6,017
Roof Drainage			0	25	0	5,222
Total Permit No. 2			212	5571	\$ 80,143	\$ 1,849,426
ELECTRICAL PERMIT NO. 3			638	8738	\$ 1,357,711	\$ 14,294,831
PLUMBING & DOM. APPL. PERMIT NO. 4						
Plumbing			270	4365	285,292	8,889,549
Domestic Appliances			0	18	0	14,272
Total Permit No. 4			270	4383	\$ 285,292	\$ 8,903,821
SIGN PERMIT NO. 5			95	1328	\$ 39,148	\$ 509,183
ELEVATOR PERMIT NO. 6			6	115	\$ 16,225	\$ 3,643,869
STEAM, HOT WATER HTG. PERMIT NO. 7						
Steam Heating			9	161	25,062	3,774,229
Hot Water Heating			48	691	318,951	4,424,946
Total Permit No. 7			57	852	\$ 344,013	\$ 8,199,175
REFRIGERATION PERMIT NO. 8			22	266	\$ 46,052	\$ 2,335,713
GAS FITTING PERMIT NO. 9			76	1057	\$ 19,464	\$ 242,022
FIRE PROTECTION PERMIT NO. 10			9	161	\$ 14,553	\$ 831,917
WARM AIR HTG., VENT. PERMIT NO. 11						
Warm Air Heating			327	4033	254,189	3,731,159
Ventilation & Ductwork			33	723	74,114	2,621,677
Total Permit No. 11			360	4756	\$ 328,303	\$ 6,352,836
WATER HEATER, OXYGEN SYS. PERMIT NO. 12						
Water Heaters			625	4888	68,785	747,836
Oxygen Systems			0	3	0	62,800
Total Permit No. 12			625	4891	\$ 68,785	\$ 810,636
GRAND TOTAL DECEMBER, 1962			2779	39,989	\$ 7,021,552	\$ 132,000,000
GRAND TOTAL DECEMBER, 1961			2537	41,277	\$ 6,946,971	\$ 118,000,000
COMPARISON			-242	-1288	\$ 64,581	\$ 14,000,000

APPROVED: W. J. BASTICH, Director

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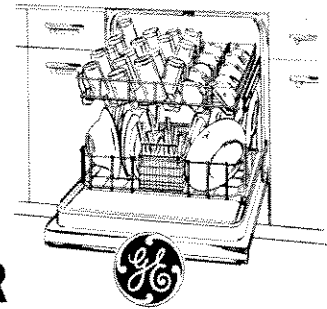


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MAJOR APPLIANCE DIVISION

GENERAL ELECTRIC
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DENVER DISTRICT

JEFFERSON COUNTY continued from page 13

Certificate was issued and he was appointed Captain of a Detection team to be selected at a later date.

Beginning January 1, 1963, there will be several changes made from the 1958 Edition of UBC. This proved a very valuable undertaking and many items were discussed in detail.

During the past year a closer relationship between the building department, the fire department, and the school district has been established and a semi-annual meeting is held during which time all of our mutual problems and complaints are discussed and decisions are made as to improvements or modifications that are necessary to make each school building safer.

Jefferson County is fortunate to have acquired one of the finest for the position of Chief of the Lakewood Fire Protection District's paid fire department.

We are happy to introduce to the Chapter, Emmett Schmidt, born and raised in Kansas City, Missouri. He is one of a family of seven firemen, each of whom proved themselves in the field. Emmett Rose from the ranks to battalion Chief in Kansas City and after 23 years of service retired and came to Colorado to live. After a well deserved rest he was appointed Chief of the Lakewood Fire Protection District in 1962. In the past year, he has been able to instigate many new programs for fire prevention and protection. A new central phone center has been installed and 70 call boxes, all automatic, have been installed at strategic locations, throughout his 26 square mile area. Each school and all nursing homes have a call box that will be answered immediately by a truck company, a rescue squad, and an assistant chief. All trucks and equipment are 100% radio controlled so that there is no need to wait for a destination.

Congratulations to Colo. I.C.B.O.

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Jerry Berger

GROWTH AND DEVELOPMENT OF THE CITY OF LITTLETON

Littleton is located in North-Central Colorado, along the Platte River—ten miles South of downtown Denver. It was incorporated in 1890, and is the County Seat for Arapahoe County.

Littleton has a square mile radius of 4.57 as of this date Feb. 1963, there were 3.7 square miles in 1959, which shows a gain of .87 miles of annexation.

Population for 1950 was: 3,378
 1960 was: 13,595
 1963 was: 16,500

The large growth of population from 1950 to 1960 was due largely to the Martin-Marietta Co. Plant, which employs 14,000, and is located 10 miles Southwest of Littleton. Other leading industry include: American Coleman Co., which manufactures trucks, tractors & snow equipment. Minneapolis Honeywell, 7800 S. Colorado, is an electronics Data Processing Division, which is a booster to City employment. The Norgren-Stemac Co.—nonferrous foundries, Red Comet Inc.—Fire Extinguishers, and Metron Instrument Co.—Mechanical Meas. and Controlling Instruments.

Littleton is the home of the National Little Britches Rodeo Finals, and the Marathon Oil Research Center, located at 7400 S. Broadway, inspired by a 150 mile view of the Rockies. The annual County Fair in Littleton is held in mid-August. Centennial Race Track is located less than a mile from downtown Littleton, with Thoroughbred Racing from June 28th to Sept. 9th and Quarter Horse racing from Sept. 14th to Oct. 12th, 1963.

Community improvement projects accomplished within the last five years include:

- Sterne Parkway
- Acquisition & Development of additional park lands
- Expansion of water facilities
- Storage & Transfer facilities & enlargement of Sewage Disposal Plant
- Dog Pound
- New Fire Station
- Four New Fire Trucks

Howard D. McMahan was appointed as City Manager June 1, 1962. He holds a B.A. Degree from Geneva College, Beaver Falls, Pa. and a Master of Public Administration Degree from the Univ. of Kansas.

Littleton, as a home rule City, Chartered in July of 1959, operates under Council form of Government. Littleton City land presently zoned for industrial use includes: 9.0 acres of improved land and 1.4 acres of unimproved land.

Victor Fowler is Chief Building Inspection, and is in charge of all inspections. The Building, Engineering, Street, Sewer and Maintenance Department's operate under the Department of Public Works, directed by Robert M. Ryan.

Building is regulated by the 1958 Uniform Building Code and no license is required to build in the City. Plumbers and Electricians are required to carry a State license only.

Number of Building permits & valuation for the last 5 years

YEAR	NO. OF PERMITS	VALUATION
	444	\$5,351.18
1959	788	5,362,181
1960	1101	7,989,103.04
1961	1063	6,725,600.28
1962	1212	5,990,606.45

Today the growth of Littleton is tremendous in scope.

Victor Fowler
 Chief Bldg. Inspector
 Littleton, Colorado



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**ARAPAHOE COUNTY BUILDING DEPARTMENT
 Courthouse, Littleton, Colorado**

The zoned unincorporated area of Arapahoe County continues to show a healthy growth each year. Since 1950, this is most significant, in view of the large land area transferred by annexations to jurisdictions of cities and towns. Most of the land area that has been transferred was choice subdivision land and is rapidly being developed as such by the cities and towns who annexed the land.

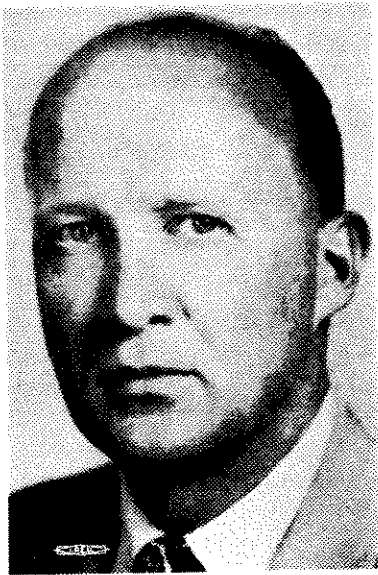
The Arapahoe County Building Department issued 2,856 permits in 1962, a 27% increase above 1961. An estimated cost of \$45,426,820, an increase of 23½% above 1961. Inspections made 15,696, an increase of 28% above 1961. Inspection miles traveled 42,000, an increase of 26% above 1961.

Arapahoe County became a Class A member of the ICBO in 1962. The Building Code Committee appointed by the County Commissioners and directed by Fred Janssen, Chairman, made a preliminary report recommending the adoption of the Uniform Code. Because adoption cannot be made by reference and the Colorado State Statutes must be amended to permit adoption by reference, it will be 1964 before Arapahoe County can benefit from the adoption of the Uniform Code; providing the State Legislature makes an amendment to the State Statutes at the 1964 Session of the Colorado Legislature.

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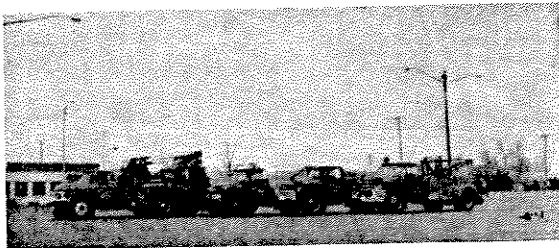
The Colorado Chapter of the ICBO wishes to commend Frank G. Van Portfliet, retiring member of the Colorado Industrial Commission, for the fine cooperation received in recent years when he served as chairman of that State agency.

During his tenure of office there was whole-hearted endorsement of the aims of the chapter, and firm support of agency personnel participating in chapter affairs.

His interest has been, for the major portion of his years, in good construction and safe working conditions—including six years with the Industrial Commission, two years as secretary-treasurer of the Colorado Labor Council AFL-CIO, and six years as secretary-treasurer of the Colorado State Federation of Labor.

He served many years as secretary-treasurer and business manager of Plasterers' Local Union No. 32, after having held every chair of office from sergeant-at-arms through the presidency as a union member.

The Colorado Chapter salutes a good friend, and wishes him well.



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The history of The Colorado Fuel and Iron Corporation, one of the leading steelmakers in the country, is closely related to the industrial development of America. For, through growth and development, CF&I has been able to help our nation build up its industrial potential along the years.

Today, CF&I's role as a national, and international, supplier of quality steel continues, as CF&I products are shipped to every state of the Union, as well as to many foreign countries.

CF&I traces its origins to one of America's most colorful eras of industrial growth, a time when early pioneers foresaw a great future for the Western Empire. One of these pioneers was General William Jackson Palmer, builder of railroads and towns, who, on January 11, 1872, five years before Colorado became a state, founded the Colorado Improvement Co., forerunner of the present Colorado Fuel and Iron Corporation.

Palmer's new company was created for "... the establishment and building of colonies, towns, coal mining, iron making and manufacturing works, to build canals and wagon roads..." Just ten years later, on April 12, 1882, CF&I's first rails for the western railroads were rolled at the company's plant in Pueblo, Colorado. Since then, CF&I has been one of the major rail producers in the country and is still the only manufacturer of steel rails and fastenings west of the Mississippi.

In years that followed CF&I grew quickly through improvements and innovation. A progressive management sparked the drive to find new uses and new markets for existing products, develop new products, modernize plants and equipment, and build new facilities.

At the same time, CF&I acquired other steelmaking companies from the Atlantic to the Pacific to build up its potential and better serve the nation.

In 1937 CF&I acquired the 58-year-old California Wire Cloth Co. The new company gave CF&I plants in Oakland and South San Francisco manufacturing hardware cloth, industrial screens, and wire products. Although wire products were not new in the CF&I line, sales on the West Coast were for the first time more easily accessible to the Pueblo operation, with its output now closely tied in with the new subsidiary's production.

Following World War II, CF&I, through merger, obtained the Wickwire Spencer Steel Co., in 1945. For the first time CF&I had plants at Palmer, Clinton and Worcester, Massachusetts; Buffalo, N. Y.; and a subsidiary, the American Wire Fabrics Co., with a plant in Mt. Wolf, Pennsylvania.

Expansion further progressed when, in 1951, the Claymont Plant, in Claymont, Delaware, was purchased from the Worth Steel Co., and in 1952, CF&I acquired the Birdsboro, Pa., Plant where British mercenaries of Revolutionary Days once burned the original forge. Included in the purchase was the Brooke Plant's subsidiary the Richard Ore Co., in Wharton, N. J.

And it was also in 1952 that the John A. Roebling's Sons Corporation, at Roebling and Treton, N. J., became a CF&I subsidiary. A division of CF&I since 1959, Roebling has been one of the pioneers in the field of wire specialties, wire rope and strand, strip, and bridge construction materials and services. It was Roebling who erected the

(Continued on Page 54)

Industrial Growth in Boulder

Industry in the Boulder area has changed drastically in the past 80 years. Agriculture, mining and trade were the major employers for 80 years. Boulder was founded during the gold rush because of its location at the entrance to Boulder Canyon. This location on the plains lent itself to agriculture and trade activities supplying the mining area in the canyons.

Change had its meager beginnings, but not identifiable, in 1877, when the University of Colorado was founded. In 1880, thirteen students, two instructors and one building comprised the University. Today, 12,135 students, and nearly 2,600 employees make it the 25th largest University in the country, and the largest employer in the City.

The most dramatic changes in Boulder's history occurred in the decade of the 50's. The Denver-Boulder Toll Road began operation in January 1952. Four major research and development industries were founded in the Boulder area: National Bureau of Standards and Dow Chemical at Rocky Flats, both established in 1951; Beech Aircraft Corporation in 1955; and Ball Brothers, Inc. in 1956. Initially, 1000 or more jobs were created by these firms. Their growth during the decade exceed 100 per cent and continues at a rapid rate. The Bureau has

reported plans to double their employment by 1967 to approximately 2600 employees. Between 1958 and 1961, 514 employees were added to the staff of Dow Chemical Company. Because of the nature of their work—research or atomic energy—including its peaceful applications, continued growth can reasonably be assumed. Ball Brothers has nearly doubled since 1960. The success of their solar observation satellites and successful by-products from thier research assures them of a bright future. The future of Beech Aircraft cannot be assessed from past employment or production figures. However, the fields of research they are exploring have proved fertile for other firms and could prove promising particularly in the field of cryogenics. The University of Colorado is a rapidly expanding concern and it is estimated that 21,260 students will be enrolled by 1972. It is further estimated that approximately 4,250 people will be employed by the University.

Dow, Beech, Ball Brothers and the National Bureau of Standards are pioneering in such fields as cryogenics, radio investigation of the universe, solar observation, digital television, microwave transmission, commercial use of atomic power, atmosphere and meteorolglcal research in addition to other major fields.

The stimuli offered by the nature of the work done by these firms has created a dynamic magnetic force that will undoubtedly spawn many more industries.

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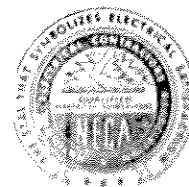
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Cocktail Hour — Given by Colorado Chapter at San Diego ICBO Annual Business Meeting, 1962. Guests included Mr. and Mrs. Gerald Wilson, Glendale, Calif., John Behrens, Fresno, Calif., Bruce Randall, ICBO, Pasadena, Calif. and Mr. and Mrs. Ed Swanty, Mesa, Ariz.



Mr. and Mrs. Gerald Wilson, Glendale, Calif.—Foreground. Left: Tom Briggs, Aurora—Rear Left: John Behrens, Fresno, Calif. (Member, Colo. Chap.). Rear Right: Bruce Randall, ICBO, Pasadena, Calif.

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A city of paradox and progress is Englewood, whose civic character retains its informality and western warmth in the face of unparalleled growth and industrial expansion. With 33,398 residents, it is the largest city in Arapahoe County and sixth largest in the State. Englewood has climbed to the position of the fourth largest in retail sales in Colorado.

Ninety firms comprise her industrial family, producing such diverse products as electric components, heavy machinery, sporting goods, construction materials and items for home use. In and adjacent to Englewood are abundant and varied business and industrial sites available for leasing or purchase with utilities and transportation facilities established or available.

Englewood is a Home Rule City and was officially incorporated on May 13, 1903, and is known as the "Carnation City" from its many greenhouses growing Colorado Carnations. Water, gas, and power facilities are the best and most economical in the region.

Over fifty million dollars in building permits have been issued in the past ten years. Countless deluxe apartments have been constructed within the past few years, many with swimming pools and recreation facilities. The Swedish Hospital is completing a three million dollar expansion program increasing the bed capacity to 198.

The Building Department personnel includes five people. Two young ladies, Mrs. Leslie Keckler and Mrs. Susie Schneider, who manage the office work, and three inspectors, Beryl Wallace, Vince Scrivner, and Robert Carman. Office hours are from 8:00 A.M. to 5:00 P.M., Monday through Friday, however, construction permits are approved between the hours of 8:00 A.M. and 11:00 A.M. on Saturday.

As a community of comfortable homes and family activity, Englewood is unexcelled even in a state known for its emphasis on home and family life. Here is a city of excellent schools, churches of all denominations, an outstanding parks and recreational program and community and cultural activities unmatched in cities of similar size.

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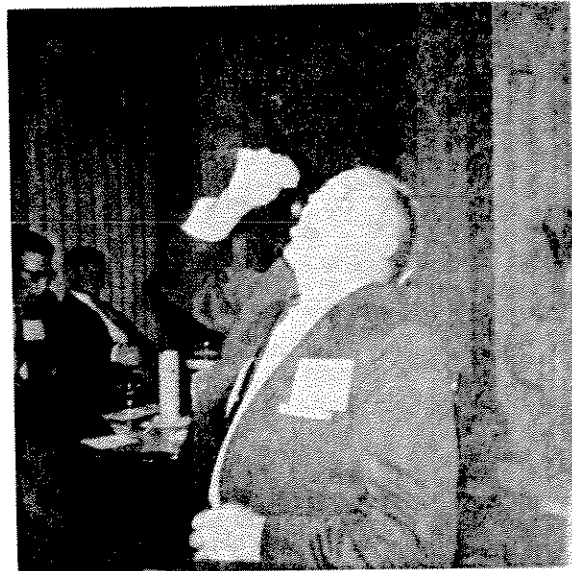
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Breakfast—Colo. Chapter at San Diego, Calif. ICBO Annual Business Meeting.



Ed Swanty, Mesa, Ariz., eating a green cherry—(Colo. Chap. Cocktail Hour—San Diego, Calif.)

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BUILDING DEPARTMENT

CITY OF ASPEN—COUNTY OF PITKIN, COLORADO

James J. Markalunas, Chief Building Inspector

The Aspen area is an internationally renowned ski resort and cultural center of 1,500 population. Formerly a silver camp of 15,000 population in the 1880's, Aspen soon became a quiet town of 500 until the late 1940's when skiing and cultural activities placed Aspen in the limelight. The area over the past decade has witnessed a construction boom which now amounts to approximately \$2,000,000 per year, principally consisting of residences, resort lodges and other recreation facilities. Among this year's accomplishments in new construction are a bank, church, two apartment buildings, a 400-seat memorial assembly and office building, and a physics building, the first of several buildings for advanced studies by the Aspen Institute.

The recreational facilities have been enhanced by the addition of three new ski lifts and the City of Aspen has begun the first phase of a curb and gutter program. In addition, the City has published a new Official Code. The last Official Code was published in the year 1890.

Both the City of Aspen and Pitkin County have undertaken a long range planning program for this area. The famous international designer, Paul Lester Weiner, who has planned for the capitals of South America and Europe, has been engaged to draft the master plan. Unique among master plans, its dominant theme will be the compatible utilization and preservation of the area's environment and natural resources.

Planning is progress and change in an orderly way and building codes serve an important function in planning. Through organizations such as the International Conference of Building Officials, the planner has access to uniform and current regulations. Today's building codes and safety regulations will determine the factor of safety in our future habitation.

We in Aspen want the best, this is why we are proud to belong to the Colorado Chapter, I.C.B.O.

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Contribution of the Arvada Chamber of Commerce

The beauty of the gently rolling terrain east of the mountains inspired builders of subdivisions to select sites for development and as a result the population of Arvada has expanded from about 2,000 to 30,000 in ten years.

In the beginning, the discovery of gold in Ralston Creek brought the pioneer to the Arvada area. Until 1950 Arvada's economy was based on agriculture, but since then industry is looking favorably at Arvada and several larger plants and many smaller factories are in successful operation.

Arvada has a City Manager form of government with James Jensen as City Manager. Gail Gilbert, Mayor, together with the Council has led the metropolitan area in such important issues as water, metropolitan sewer district, both problems have now been solved. The city has water to accommodate a population of 100,000 people.

The building department under Benton G. Kinkel, Chief Building Inspector of Arvada, has kept abreast of the great building program and is so conducted that it can care for the demands which are to come.

Arvada, "On The Sunrise Side of the Rockies," stands first in Colorado in growth, leads in Metropolitan cooperation, is ideal for pleasant living, well located for industry, has excellent schools and in itself offers a cordial invitation to new people.

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We believe:

That faith in God gives meaning and purpose to human life;

That the brotherhood of man transcends the sovereignty of nations;

That economic justice can best be won by free men through free enterprise;

That government should be of laws rather than of men;

That earth's greatest treasure lies in human personality;

And that service to humanity is the best work of life.

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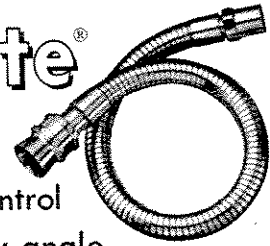
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CITY OF CASPER, WYOMING

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Newell Pock, Building Inspector

Mr. Pock is presently the Chief Building Inspector for the City of Casper and has acted in that capacity since May of 1958. Prior to entering inspection work, he operated his own construction firm in Casper.

Casper is a Mile High City located in the Center of Wyoming on the North Platte River and at the foot of Casper Mountain. The County Seat of Natrona County, it has shown a rapid growth from 1950 to 1960 and has reached a population of 40,000 people, with land, water and power to spare. The City of Casper could accommodate twice this population.

Casper chose the City Manager form of Government in 1958. Mr. Henry Rolfes, Jr., City Manager, is responsible for all administration affairs of the City and has been the only City Manager. Mr. Mike Orton is the present Mayor of Casper having been chosen from the nine Councilmen.

The Casper City Council has, for many years, adopted the Uniform Building Code, the Uniform Sign Code, the Uniform Plumbing Code and the National Electric Code.

1962 construction in Casper totaled \$8,252,819.00 which is over a record year but is the average for the last 10 year period. Building added 240 new homes for a total of \$3,203,700.00, 1960 permits were issued for roof repair due to a July hail damage. A total of 2000 building permits were issued. 1963 has the prospect of being a great year with proposed commercial construction and normal residential construction.

The Building Department operates under the City Engineer's office and Mr. Emeril Huber is the present City Engineer. Newell Pock is Chief Building Inspector. Other staff members include: Bob Waggoner, Assistant City Engineer, Leonard Thomas, Senior Building Inspector, Earl Freeseau, Plumbing Inspector, Lester Harrison, Electrical Inspector, Gene Hagilla, Surveyor, Don Jones, Engineer, and Josephine Mullin, Secretary Department.

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Development and Use of TY-Seal Gaskets for Joining Cast Iron Soil Pipe and Fittings

The TY-SEAL NEOPRENE gasket was offered to the plumbing industry in June 1961, by the Tyler Pipe and Foundry Company of Tyler, Texas. This joint was under design and development for three years before its release to the industry. TY-SEAL may be described as a one piece, double-seal compression type gasket. It is intended to join only pipe and fittings with plain-end spigots, and must be made to careful tolerances. In fact, these products are manufactured with closer tolerances than required in commercial standard 188-59, the current industry standard for Cast Iron Soil Pipe and Fittings.

Criteria for the development of this joint were derived from the characteristics of the lead-and-oakum joint; i.e., reasonably leak-proof, reasonably rigid, resistant to compounds found in sewage, gas-proof, infiltrationproof, resistant to high and low temperatures, etc.

From its inception, TY-SEAL was intended to be *at least equal* to the lead-and-oakum joint, but after development and testing, it was found that TY-SEAL was not just equal, but actually superior to any joining system in use.

There are twelve qualities and characteristics which distinguish TY-SEAL from other joining methods for Cast Iron Soil Pipe and Fittings.

(1) **Made of Du Pont NEOPRENE**—which has a demonstrated

history of service in hundreds of applications well-documented by the Du Pont Company.

- (2) **Double-seal**—its inside seal is to stabilize as well as to insure proper centering.
- (3) **Leakproof as soon as jointed**—There is never a need for re-caulking. Over 100,000 joints have been properly made with TY-SEAL, yet not a single leak has been reported.
- (4) **No Exfiltration**—Hence, no root growth.
- (5) **No infiltration**—A point of extreme importance in areas plagued by regular or periodic high level ground water.
- (6) **May be safely and securely joined under water**. Weather conditions need no longer be a prime consideration governing work progress.
- (7) **Exactly formed**—Precision forming gives concentricity, which assures smooth joints that are positively sealed.
- (8) **High-pressure and surge sealing**. Pressure characteristics are at least equal, if not superior to best sophisticated gaskets for pressure pipe. TY-SEAL will hold pressure internally and externally three hundred pounds per square inch and higher.
- (9) **Temperature resistant**. TY-SEAL joints will seal at temperatures from -50 to lower to +212 degrees Fahrenheit.

(Continued on Page 52)

TY-Seal Gaskets

(Continued from Page 51)

- (10) **Deflection Resistance**—TY-SEAL joints can be deflected safely 5 degrees or more and straightened again without a permanent loss of seal.
- (11) **Vibration resistance**—Vibration will not cause TY-SEAL to leak, which makes it very suitable in installations near machinery, under streets and highways, and in hospitals and other critical points.
- (12) **Standards and Specifications**—TY-SEAL is made to the most rigorous standards and specifications, and it has been carefully tested to insure that it meets those specifications.

To dramatize and further accentuate the dependability of the TY-SEAL joint, its producers offer a written 50-GUARANTEE when used with suitable pipe and fittings.

This 50-YEAR GUARANTEE is backed by the Tyler Pipe and Foundry Company and a \$10,000 Perpetual Trust Fund at the Tyler Bank and Trust Company, Tyler, Texas.

TY-SEAL NEOPRENE Gaskets are a giant step forward in the protection of public sanitary standards.

A new level of usage, employing the unquestioned superiority of Cast Iron, will surely occur. In this new age of technological achievements, the TY-SEAL NEOPRENE gasket will rank high among engineering contributions to public sanitary standards.

For Further Information, Test Reports and Specification Data, Please Contact
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P.O. Box 2027 • Tyler, Texas

Growth Within a Community

Expanding to meet the inadequate hospital needs of a fast-growing community. This simple statement of purpose for Swedish Hospital, 3401 South Clarkson Street in Englewood, Colorado veils a tremendous amount of soul-searching, re-evaluation of goals and fund-raising effort by the administration and the loyal group of backers who have supported the hospital in the past.

A new six-story wing is being added to the hospital making available 238 beds. It is expected to be completed this fall.

Swedish Hospital was begun in 1909 as a private tuberculosis sanatorium. In 1956 it was presented to the community of Englewood by the founders as a non-profit, charitable hospital without any expense or investment by the local community. As Metropolitan Denver continued to expand in population, being one of the fastest growing areas in the country, it was apparent that available hospital facilities were becoming inadequate. At that time Swedish Hospital offered 90 beds. The Board of Trustees decided to embark on a fund-raising campaign to enlarge the bed capacity and add more and modern facilities.

A community building-fund campaign conducted in 1960-1961 raised \$830,000. To this was added a federal grant under the Hill-Burton Act and a loan. The new \$3 million wing was begun in the Summer of 1962.

With the completion of the new wing, Swedish will offer the City of Englewood for the first time pediatrics and obstetrics services. In addition, four operating rooms, a recovery room and a cystoscopy room (used for surgery and treatment of bladder ailments) will be

housed in the new wing. All but one of the present service departments will be moved into the newly constructed quarters with their previous areas being converted into wards. The emergency rooms and ambulance entrance, the x-ray and pathological laboratories, central supply, hospital kitchen, dining room, lobby and some office space will be located in the new wing also. Just off the lobby a modern chapel will be constructed as the result of a gift from one of the hospital's patients. enlarged parking areas will be provided.

Swedish Hospital maintains a complete Out-patient Department as a service to the community and this will be expanded when the hospital is enlarged. It will still maintain a seven-bed tuberculosis ward and a nursing home, also.

Economically, the expansion of the facility will add greatly to the Englewood area, reflected in the increased need for supplies as well as a great increase in personnel. It is anticipated the number of people to be employed by the hospital will rise to at least 550.

"The community has been good to the hospital," says Roger G. Larson, Administrator of Swedish Hospital, "and Swedish feels an obligation to serve Englewood and the surrounding area of Arapahoe County with a first class hospital operation. Our vision extends even further into the future beyond the completion of the new wing. We hope to establish an intern program to help prepare new doctors to serve the area. Our discussions have also included a school of nursing which we are hopeful of starting in the not-too-distant future. We are anxious to meet the great challenges which face us in providing adequate, modern hospital facilities for the community which has now grown to be the 5th largest city in the State of Colorado."

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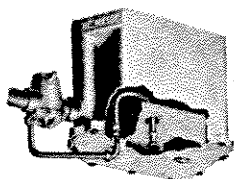
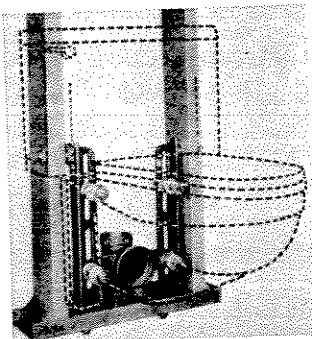
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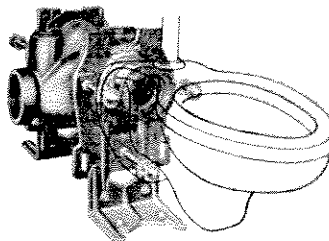
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CITY OF FORT COLLINS

Fort Collins, the home of Colorado State University, lies 65 miles north of Denver, just east of the colorful Rockies of Colorado. Since 1950, Fort Collins has grown almost proportionally with the enrollment at CSU, not only in population, but also in area, as the following figures will support.

YEAR	ENROLLMENT AT CSU	AREA OF FT. COLLINS	POPULATION
1950	3751	1,900 acres	14,537
1962	7304	4,082 acres	25,000 plus

Since 1949 there has been over 2.5 million dollars spent in building and remodeling, with permits issued in 1959 for over \$9 million and 1962 approaching \$7.5 million. From all earmarks, 1963 is apt to surpass all previous years in new construction.

The Chief Building Inspector of Fort Collins is Ken Christensen, who has held that position for one year, and the Deputies are, Herman Salzman and Glenn Keene, who have held their positions for 5 years and 3 years, respectively.

Respectfully submitted,
Ken Christensen
Chief Building Inspector

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(Continued from Page 40)

Brooklyn Bridge and spun the cable for San Francisco's Golden Gate Bridge, the longest suspension bridge in the world.

During all the years since General Palmer founded the "Pioneer Steelmaker of the West," giant strides were made at CF&I in the field of safety and human relations. In 1910, the first mine rescue car went into operation in the coal fields of southern Colorado, setting a nationwide precedent. And CF&I became the first steel company in America to adopt collective bargaining as a policy.

As early as 1916, committees were set up to discuss wage rates, common problems of safety, healthful working conditions, sanitation, education, common welfare, and security provisions in the form of insurance hospital care, out-patient care, and industrial hygiene.

Two years later, in 1918, CF&I became the first steel company in the nation to adopt the eight-hour day for its employees.

While no efforts were spared to insure the welfare of the CF&I employees, at the same time millions of dollars were spent to bring each plant to maximum efficiency and back up CF&I service with top quality steel. As a result, CF&I is today one of the most modern steel-makers in the country.

In line with its modernization and expansion program, CF&I less than two years ago put into production two Basic Oxygen steel furnaces at the Pueblo Plant. And just last month, on January 10, the Pueblo Plant started operating a new mill that rolls wide flange beams with parallel faces. These beams, a staple of the construction industry, are the first ones to be manufactured west of the Mississippi and are expected to improve CF&I's position in serving the western markets.

CF&I has been fortunate in having good basic plants on which to build, and its progress has also been due in great measure to the enthusiastic and capable manner in which operating, sales and administrative personnel with long experience in the steel business, have followed the leadership of its management.

CF&I faces the future with confidence. We sincerely believe we have built well, but our job is not finished. Some improvements are newly completed and some are still in process. We recognize that we should continue to use research and diversification as a basic theme if we are to progress and keep pace with the economic growth of our country.

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CITY OF ARVADA, COLORADO

By James L. Jensen, City Manager

Growth activities in the City of Arvada are continuing at record-breaking paces, and are expected to continue in the near future. Assessed valuation had increased from \$1,531,670 in 1960 to \$39,351,000 in 1962—a twenty-five-fold growth. Population has increased from 2,359 to nearly 30,000 in that same period—a thirteen-fold increase. Thus it is obvious that the city activities, including, building, engineering, planning, and others have been stretching at the seams to stay abreast of needs.

To provide a more efficient and adaptable vehicle with which to meet community needs, the city has decided to adopt a Home Rule Charter, and the adoption procedures are now underway.

The beginning of 1963 also begins efforts to execute an urban renewal project in the central business area basically created for the 1950 population. Project cost is nearly \$5,000,000.

The completion of a new water plant below Ralston Reservoir, west of the city, provides the base for an adequate water supply for many years, and has eliminated the

need for water crises which so often plague cities in this area.

The City Council has adopted the current Uniform Building and Housing Codes as another means of keeping abreast with time and duties.

Entrance into 1963 also saw the functioning of a new venture into cooperation and co-ordination of ideas and the planning and carrying out of the city's expansion and development. A "Community Goals Committee" was deliberating the various aspects of community life with the intent of adopting, early in 1963, long-term and general goals for the city. These will be centered around the question of "What do we want Arvada to be and have in 1975?" The committee is composed of the Council, Planning Board, City Administration, School Board, Recreation and Park District Board, Chamber of Commerce and Jaycee representatives—a thorough cross-section of the city.

In general, there is in the air an atmosphere of great expectation, optimism and confidence of things to come in this city.

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A NEW DEVELOPMENT IN THE BRICK INDUSTRY

HIGH BOND MOTAR

At the Denver Brick and Pipe plant, bricklayers recently completed a project which achieved great recognition toward industry progress. Under direction of William G. Temple, President of the Denver Brick and Pipe Company, the first prefabricated brick panels were constructed using a new super mortar called "Sarabond."* The panels varied in size up to 20 feet wide, 5 feet high and 4 inches thick. These panels weighed as much as 3600 pounds each. A 170 foot boom crane lifted them skyward atop the new seven-story United Fund Building at 14th Avenue and Delaware in Denver.

Once the panels were placed by the crane, they were welded in place by a bricklayer-welder. Erection was so swift that roofers were able to install roof decking as soon as a few panels were placed in position. These panels, 4 inches thick, now provide load bearing exterior walls for the mechanical penthouse of the new building. The 57 panels for the penthouse were installed by two bricklayers and a bricklayer-welder in three days.

The prefab panelized construction, along with many other new applications of brick masonry construction, is being made possible by the use of the new super mortar Sarabond*. This unique high bond mortar is in the final development stages by the Dow Chemical Company and the Structural Clay Products Research Foundation. With Sarabond mortar, load bearing brick walls 4 inches thick can be constructed without the support of inner framework or masonry back-up. Such walls have at least four times the strength of 4 inch brick walls constructed with conventional mortar. In fact, the strengths of Sarabond mortar approach those of brick which in many cases is five times as strong as the normal concrete mix.

Fire resistance tests are all-important for code and architectural acceptance. 4 inch brick walls built with Sarabond and tested under rigid ASTM specifications were found to have a 1½ hour rating when insulated and a 1 hour rating uninsulated. Sarabond mortar is easily mixed, like conventional mortar. The workman at the job site does the mixing. Sarabond liquid, a white milky substance, is simply added to the proper proportions of Portland Cement and

sand. Some water may be added to improve workability. When thoroughly mixed, the mortar is ready to use.

Building up thin, unsupported walls presents no problems to masons. They find the high bond mortar handles easily and gives a mortar bed with a slump comparable to that of conventional mortars. Tenders readily keep brick and mortar supplied to masons who easily maintain their normal bricks-lead-per-hour-rates.

At present, Sarabond is being used on a field trial basis in a few cities throughout the United States. Denver has been one of these key cities and has used Sarabond on several projects in the Metropolitan area.

Thorough on-site evaluation is being given to the use of Sarabond mortar before placing it on the commercial market. Very few problems are being encountered and in the near future, Sarabond mortar will be available for use. With brick and Sarabond mortar load bearing walls can be constructed to answer the structural needs of those in the building industry.

* Trademark of the Dow Chemical Co.