

Greatest Engineering Feat of the West Complete By Ed Kelly Pueblo Chieftain January 2, 1927

An outstanding achievement of the year just past was the completion of one of the most stupendous and daring tasks ever undertaken by man the movement bodily of a turbulent, potentially rushing river, that every city might be safe from flood.

Few there were in those tragic days immediately following the flood of June 2, 1921, who were able to give cogent thought to the future. To most, the pressing needs and sorrows of the present blotted out all else. Yet all realized that if the city of Pueblo was to endure, some prompt action against the fury of the elements much be taken.

In the latter part of June 1921, the city commissioners realized the necessity of bring to bear on this problem all the best thought and judgment an industrial center afforded issued a call for a committee of one hundred of the highest type of western citizen, brainy men of foresight, knowledge and judgment to meet with and advise them. The members of the committee were selected only on a basis of personal worth, partly lines and all prejudices being thrown to the winds under the pressure of a major emergency.

The first meeting of the committee was held in the city council chambers, with a full attendance. It was apparent to all as the session opened that here was gathered a courageous determined group, willing to drive ahead regardless of personal desires for the ultimate good of all.

Committee of Twelve

It was immediately brought out in the sessions that a committee of one hundred was too large a body to convene for the necessary switch action of prevention of future disasters and a smaller committee was authorized. Twelve was decided upon as the proper membership. From the selection and organization of the committee of 12, Pueblo's flood prevention work may properly be dated.

The immediate problems facing the committee of 12 was; first, the necessary legislation to permit the city to bond itself to secure some sort of flood prevention and second, a workable plan or plans to subdue the ever menacing river.

One of the first official acts of the committed was the employment of the Dayton-Morgan Engineering company for a preliminary survey of the possible flood prevention plans. The company clearly the outstanding firm in the field, was chosen because of its then recently successful completion of the flood prevention work at Dayton, Ohio which city was then in the secondary stage of recovery from a titanic inundation.

A close investigation of the work at Dayton and of the record of the Dayton-Morgan people, convinced the conservancy board that he firm was the logical one to undertake the Pueblo project.

A legislative program was also immediately mapped out, with a group of members of the local bar association draughting the proposed law which upon completion was promptly carried through both houses to the governor, by Pueblo legislators. The conservancy act was fostered and presented by Senator W. O. Peterson, and Representative Morria Penter, A. G. Stubblefield, J. C. Mortenson and C. W. Porter, at the extraordinary session of the twenty third legislature. The bill passed and became law under the signature of Governor Oliver H. Shoup, April 29, 1922.

Conservancy Board

The conservancy law as passed by the state legislature provided for a board of three members to be named by the district court. All control of the district was vested in the board subject to the approval of the district judge under whose direction the district was placed. Through an agreement between Judge J. A. Park and Judge S. D. Trimble the court of the former was given jurisdiction over conservancy matters.

The first board of directors of the district as certified by Judge Park was Charles W. Lee, O. Harvey Nuchols and William F. Raber. Later upon removal from the city of Raber, Robert G. Breckenridge, manger of the Pueblo Flour Mills

was appointed to fill the vacancy.

Immediately upon the entry of the order appointing the board as constituted, an organizational meeting was called. Director Charles W. Lee was chosen as president, and F. D. Sprhill was selected to act as secretary.

No one realized more fully that the three directors, the stupendous task confronting them. A force of experts in numerous lines must be gathered, clerical help secured and the whole conservancy program launched with nothing but the bare idea with which to work. Undaunted however, a few bold vigorous strikes brought into being a marvelous smooth running organization instantly controllable by the board.

with the appointment of the board composed as it was of the highest type of Pueblo's citizenship there was a noticeable increase in confidence and enterprise among the stricken merchants and property owners in the flooded district. Some of the optimism and aggressiveness which marked the rise of Pueblo from the dreary frog pond of good times to the bustling thriving city of today, then began to be manifested.

One of the first acts of the conservancy board was the selecting of legal talent to assist in steering the tortuous course to the haven of flood protection. The firm of Rose and Kelly, a partnership formed some time previously by Charles M Rose and Leo P. Kelly was selected for the work, and immediately took charge of pending legal matters.

A test case, to try out the legality of the formation of the district was immediately prepared by the firm and carried to a successful conclusion in the state supreme court.

A maze of detail work then presented itself for attention. There were abstracts of title to be examined in the conveyance of land to the district for use as part of the official flood plan. A maze of technicalities were involved in the condemnation and purchase proceedings. Bids and specifications advertising for bids with a thousand and one other questions called for legal supervision.

Work Begins

The work of the attorneys in preparing for the bond issues and the actual sale and delivery of the bonds was a most important one, and over three hundred abstracts of title were examined and passed upon before and during the construction activities. In spite of the enormous volume of work undertaken by the firm, Rose and Kelly were able to keep well ahead of the schedule set.

The board again was unanimous in its choice of technical advisers. A survey of the preliminary work of the Morgan Engineering company clearly indicated the ability of Morgan and his staff to undertake the conservancy project. A careful check on all available source of information added verification and the firm was retained to take active charge.

Barton M. Jones, a brilliant engineer with an enviable record in the Dayton project, was chosen by President Arthur E. Morgan to head the staff at Pueblo. Jones immediately took up his residence here and began to assemble his corps of assistants for the gigantic undertaking. As a right hand man he selected Walter J. Smith who remained until the final link in the conservancy chain was forged.

The clogged river bed, with its weak and broken levees, made haste a paramount issue. No delay was permitted in the preliminary survey which was begun almost coincidental with the arrival in Pueblo of Jones and Smith.

Every conceivable situation which might affect the safety of the city as canvassed by the corps of engineers. Intricate table bearing on rainfall, drainage areas, all of the thousand and one possibilities which might enter into a given situation were examined and tabulated for study.

Out of the mass of information collected and analyzed, a number of workable solutions of Pueblo's problems were developed, each guaranteeing a specific immunity from flood, though not necessarily in direct ratio to the cost. A small bound volume giving the plans in entirety with tabulations of comparative costs, advantages and disadvantages of the different suggestions, time required before some measure of protection would be available and a wealth of informative matter was prepared and presented to the directors on which to base a decision

Greater Flood Possible

The preliminary survey developed some interesting conclusions. It was brought out in the committee data that with the exception of the Dry Creek area, there was but little drainage into the Arkansas above the city for a distance west of some seven miles to the narrow neck of Rock Creek. The fact was an important one, as it made possible the barrier, finally adopted under the official plan.

It was also brought out by the engineers, that while the flood of 1921 was far beyond anything experienced during authentic history, it was by no means the greatest possible flood of the Arkansas drains and immense territory. The major portion of the watershed, lying within the danger zone so far as it might concern Pueblo, is underlain with an impervious soil, subject to rapid runoff and little vegetation to retard flow. In submitting the proposals for flood protection, therefore the engineering force under the direction of board produced a number of well considered plans, based upon the possible flow being greater than that of 1921, under the proper conditions. The plans of this group were all designed to provide against at least twice the flow encountered at that time.

The first plan of the group provided for the relocation of the river channel adjacent to the bluffs, the capacity to be 125,000 second feet, with the addition protection of a barrier basin at Rock Creek. The second plan called for a retaining basin at Rock Creek, channel improvements of a minor nature through the city and a system of diversion works in the upper part of Dry Creek. The third suggestion in the group was to widen the present channel to carry a

head of 125,000 feet without raising the old retaining walls. It also provided for a barrier, the flood protection offered being the same as that of the official plan.

Another plan called for the widening of the channel through the city with a raise of five feet in the retaining walls between a point near the Santa Fe railroad bridge, thence east to the city hall, giving with a barrier at Rock Creek, a protection about equal to that of the official plan.

The second group of proposals called for a somewhat smaller outlay with a varying measure of protection. No plan in this group gave promise of carrying more water than the estimated flow during the flood.

A great many suggestions even some with detailed estimates were presented to and considered by the board. Citizens freely expressed opinions whenever possible. Each plan was considered by its merits, hasty and ill considered actions being particularly guarded against.

The directors were well aware of the gravity of the matters before them for decision. On them rested the responsibility for the city's future. An erroneous solution based on faulty reasoning might jeopardized not only the property but even the very lives of friends and associates or possible the offspring of generations yet unborn.

Plans Completed

On the other hand, there was the necessity to consider earnestly the expenditure of even a dollar of the money of the stricken and impoverished city. Were finances in the district in a sufficiently healthy state to bear the burden of additional taxation?

It was therefore not until June 2, 1923, two years to the day after the deluge, that the report of the board adopting the so-called Bluff Channel plan with the addition of the Rock Creek Canon barrier as the official plan was presented to Judge Parks on the district for approval. In submitting the plan with the recommendations the board of directors reached the following conclusions "The Bluff Channel plan is the only one within the estimated cost that can be built with the assurance as far as human judgment can give assurance that the city will not be flooded again.

The fact that from the standpoint of community welfare, channel construction is preferable to the means where conditions permit had considerable bearing on the findings of the board, as the fact that one year in time could be saved in securing the necessary protection, over most of the larger proposals. The official plan also definitely settled the railroad question, a troublesome one under most of the other suggested methods.

With the plan approved, there was no necessity for any delay. Then board immediately, with the approval of Judge Park, announced the appointment of The Dayton-Morgan Engineering company to carry the project to completion. Appointment of the appraisal board was the next step, also with the approval of the presiding judge.

Upon the board of appraisers developed a staggering task. Every piece of property within the flooded district had to be appraised at cash value and from the figures so given the assessment for benefits derived under the flood protection plan were pro-rated on the basis of benefits.

The appraisers, F. D. Sprhill, Thomas Kelly, and Will Keen, perfected their organization and began the actual work on the appraisal in the latter part of November 1922, getting out in the field for the actual house to house investigation early in December of that year.

The first duty of the board of appraisals was to appraise the property to be taken for the new river channel beginning at the "Grove" at Santa Fe Avenue and continuing westward to the junction of the new and old channels, west of the state hospital.

Engineers were sent ahead to gather data on the physical aspects of the improvements for the use of the board and in a comparatively short time the channel was the property of the district, and it was in readiness for construction to begin, so as far as this angle of preparation was concerned.

The most difficult task undertaken by the board was the appraisal of the property lying in the principal business district, being north of the Santa Fe crossing. Every advantage was taken of the imposing array of technical talent available. Architects, builders, experts on values of all kinds were called on for counsel.

The appraisement was not primarily for arriving at a valuation on the property affected, but was to arrive at the amount of benefit accruing to the property, thru the protection from flood, it being obvious that a property, thru the protection of flood, it being obvious that a property completely submerged during the flood of 1921 would in the ordinary course of events receive a greater benefit from adequate flood prevention, than would a property in which the flood waters had reached a height of a few inches. The extent of the depreciations of each property without flood protection was also under consideration.

Appraisement Finished

Whether an exact sliding scale of percentages off flood damage should be based upon the height in inches to which the water rose during the flood or whether after a certain point was reached, the damage become complete or practically so, was another problem faced by the board. The appraisers were charged with the duty of setting a uniform damage rate corresponding with the rise in flood waters, it being apparent that one foot of water rushing thru

a given building might do more or less damage than half of what a two foot flow might be necessarily expected to produce. All engineering records available were consulted as were a large number of local business men, who were called upon for conclusions reached thru their flood experience.

The major part of the work of the appraisers was finished in November 1923, though a few valuations were made later, due to minor changes confines of the conservancy projects.

As rapidly as possible following the preliminary preparations, specification were drawn up by the engineers, for the first few contracts under the general conservancy plan, and bids were requested. Those the conservancy district board studied in detail before taking action, in a determined effort to secure the greatest possible value for the money.

As a keystone in the whole structure, the new channel was the first to get let to the successful bidder, Platt Rogers, Inc. which company immediately began to assemble equipment and to enlist a mighty army of laborers for the project. Considerable of the work was subject to other contractors by Rogers, and early in March 1924, the huge dragline of the Cole Brothers, contractors in charge of excavation of the new channel appeared just east of Santa Fe avenue.

Quietly and systematically it dredged a ditch out toward the shallow Arkansas throwing up a dirt bank on the south side.

While no official dedications marked the turning of the first earth for the new channel, it was unofficially a time of much rejoicing. Crowds of Puebloan's gathered in the vicinity of the huge machine, commenting with satisfaction of the actual beginning of a might project

Immediately after, excavation was begun for the "dinky " railroad of Platt Rogers which was to be used for the transferring of excavated materials to the new Rio Grande railroad yards, adjacent to the state hospital grounds. In a few days the powerful low wheeled narrow gauge engines were teetering their strings of dump cars up the precipitous bluff, across the West Fourth street bridge to the old dump site where modern engineering was reclaiming a swamp to make it a modern railroad yard, complete in every detail.

Flood Protection

With the coming of warm weather the construction program of startling magnitude was under way, a myriad activities being carried on at one, making a hustling panorama, as seen from the bluffs on the first mesa.

By summer, the program had advanced sufficiently so that a flood , of equal magnitude to the fatal deluge of 1921, would have paced through the city without damage, a wonderful accomplishment in the few short months of operations. Bu this time also, the new yards of the Denver and Rio Grande Western began to take form out of the muck of a worthless slough, as each shuttling train of dump cars encroaches upon the domain of the fickle Arkansas.

It is hard for the layman to visualize the engineering skill necessary in relocating the railroad yards without the loss of a moment's time in the tie-ups, and coincidentally make room for the excavators; but this is the accomplishment, and it stands as a monument to the ingenuity and skill of the conservancy forces.

By late all, the barrier located at Rock Creek, west of the city, began to assume shape. This huge reinforced concrete structure bars the way of flood waters rushing through he narrow gap of the alley at this point. So well is the location chosen that water may back up forming a natural lake of nearly fourth miles in length.

The barrier is composed of two sections. At the south is an earthen section, extending from a concrete retaining wall at the junction of the dam with the D. & R. G.W. tracks to a level well up on the high ground, over fifteen hundred lineal feet away. This portion of the barrier is pierced by the Bessemer ditch conduit, a rectangular culvert six feet high by twelve feet wide. The conduit has a capacity of four hundred second feet of water under a head of 0.04 feet.

For the passage of he railroad tracks thru the barrier, an opening thirty-one feet in width is left, between the earthen section on the south and the main or concrete portions, with heavy buttressed retaining walls with protecting wings on the southerly side.

Rock Creek Barrier

The heavy concrete section of the barrier runs due North-beginning eight feet north of the centerline of the north track and running 1,512 to the high bluff forming the north bank of the river.

This structure is a mass concrete dam of overflow sections averaging 28 feet with crest at the elevation of 4,802 feet above sea level. At the river crossing is an open top gap of 41 feet in width, while midway between the tracks and the river is an archway 9 feet wide by 11 feet high, provided for a vehicular passage thru the barrier.

To prevent wash at the a barrier junction of he spillway and the bluff on the north side of the river, closure is made by a concrete non-overflow gravity section dam 56 feet long, the top of which is 8 feet above the crest of the spillway. The top of the earth section is 13 feet above the crest of the spillway.

The spillway is built on a flat ridge of sandstone that extends across the valley at an elevation of from 17 to 20 feet above the river bed. At the river crossing is a gorge about 60 feet wide, which to some extent checks the flow of minor floods up to 25,000 second feet discharge. No material change is made in the condition by the barrier. There is therefore no interference with water rights down the alley, an important consideration with flood control.

With the development of a flood the entire flow will flow thru the river gap until the water reaches an elevation 17

feet above the river bed, or 20 feet below the crest of the spillway, when the railroad gap will come into action. At this stage the discharge will be about 39,000 second feet. With a further rise of 16.5 feet flood water will begin passage thru the Bessemer ditch conduit and the total discharge will then be about 60,000 second feet. If the rise continues to the crest of the spillway, and additional 13.5 feet, the discharge will be 100,000 second feet, with 18,000 acre feet of water backed up behind the barrier.

If water should overflow 3 1/2 feet deep over the spillway, the discharge would be 150,000 second feet. This fact is mentioned for the reason that the channel in an emergency could carry that amount of water, by full utilization of the freeboards and the extra capacity given by the parapet wall that tops the north levee for a distance of 6,000 upstream from the lower end of the main channel at Santa Fe avenue.

There seems to be no possibility however, that the flood-control works will ever be subjected to such a test, as a flood of this magnitude would result only from a storm far greater than any that can reasonably be predicted from a study of all the factors involved, such as rainfall data, drainage basin, and the character of mountain storms.

Preliminary to the design of the barrier the probable floods that would be produced by storms of various degrees of intensity and duration were carefully computed and studied.

The most severe conditions considered was that of the Official Plan flood, which is 70 percent greater both in duration and intensity than the 1921 flood. Such a storm would produce a flood having a crest flow of 145,000 second feet at the barrier. Taking the 1921 flood as typical in shape, 15 hours would be required to fill the basin at the spillway level, the crest of the flood would pass by hours before this stage was reached. In the view of the above it is believed that the possibility that a flood will ever reach spillway level is exceedingly remote and that an ample factor of safety is provided in the barrier as built.

Assuming, however that a flood may some day fill the basin to spillway level, with resultant discharge of 100,000 second feet, then practically the full force of this flood will be felt in less than an hour as the flood penetrated the works in Pueblo, as valley storage will have been exhausted by the time this stage is reached. Between the barrier and the upper Denver & Rio Grande Western bridge a distance of about four miles, the flood will spread over a valley from one-half to three-quarters of a mile wide and with this section of the river the Conservancy District is not concerned. This bridge is about two miles west of the business center of Pueblo. It is a double track thru truss plate girder bridge of four spans carried on concrete piers and abutments. In passing thru the openings of this structure the flood will have a velocity of 20 feet per second and a depth of flow of 12.5 feet. Beyond the bridge the flood will again spread over the valley, and here the problems of protection becomes complicated by the necessity of providing for floods from Dry Creek.

As days lengthen into weeks and weeks into months, the closing of the old river channel to provide space for the new railroad yards continued, while to the west across the staunch embankments designed to resist the attacks of rushing turbulent Dry Creek, normally a trickle, but subject to rapid rise of a surprising volume and velocity.

Dry Creek Bridge

During the height of the 1921 rush of water down Dry Creek 's maximum of 25,000 second feet was reached. This volume, while great was not the extreme flow that might reasonably follow a very heavy rain over the entire drainage basin, so a greater amount of protection was deemed necessary. The result was, that preparations were made, to handle a flow of 45,000 second feet from this source, even under the most unsatisfactory conditions of a full river channel.

The single track Canon City branch of the Atchison, Topeka & Santa Fe and three tracks of the relocated line of the Denver & Rio Grande cross Dry Creek almost half a mile from its junction with the river. The bridge at this point is of unusual construction, since it's designed to serve as a railroad bridge, as a link in the levee protection, and in some measure as a barrier to holding back the crests of extreme floods on Dry Creek. This structure is a reinforced concrete river bridge 200 feet in length, consisting of five 40 foot spans. There are five girders, three of which are between tracks and each track is thus carried in a concrete trough. The bridge is supported on thin piers having sufficient flexibility to take up any expansion or contraction intermediate of the structure, with an expansion joint of consisting of sliding zinc plates at each abutment. The downstream and intermediate girders are each 9 feet 6 inches high. This construction not only eliminates the expense of raising the grade of the tracks to a line about high water level, but provides for 3 feet of additional heading up on the upstream side.

Levees connecting with the abutments extend north on each side of the valley to high ground, and a levee connecting with the west abutment parallels the railroad tracks on the south to a point where the levee grade meets the grade of the railroad embankment. Beginning at the east abutment is the main levee, which 1,800 feet downstream becomes a part of the north bank of the main channel and extends approximately two miles to the lower end of the channel at Santa Fe avenue.

A problem given careful consideration was that of bringing the flood within the comparatively narrow limits of the main channel without excessive backing up at any one point. Beginning at the junction of Dry Creek and the river, the flood will be contained between the main levee on the north and the bluff at the north edge of the section of the city

known as the Mesa. From this point there is a gradual narrowing of the flood lines, with a gradual increase of velocity, until Terrace View, 1,400 west of Union Avenue the channel has a bottom width of only 169 feet. It is at this point that the main channel thru the city may be said to begin. The diversion of the river, however, begins nearly a mile west of this point, 1,600 feet east of the junction of the Arkansas River and Dry Creek.

Carry Huge Volume

The narrowest point in the new river channel has a width of 230 feet. This if figure d to a point midway between the top and the bottom of the channel on a basis of 30 feet depth. With the river believed flowing at a depth of thirty feet and carrying the enormous volume of 140,000 second feet of water there still remains an additional two feet of the levee above high water level, and above all the concrete retaining wall or parapet as an added measure of safety.

From the point of diversion, the new waterway follows the line of the Mesa bluff to a point near Santa Fe avenue and then extends across the low lands to a junction with the old channel near the Colorado & Southern bridge. The length of the new channel is 2.46 miles. the old river channel follows a winding course through the city, the greatest distance between the old and new locations being half a mile.

About one million cubic yards of excavation was required in the construction of the new waterway, the greater part of this excavation being in the sections between Terrace View and Santa Fe avenue. In this section the cut below the valley floor averages 15 feet, this cut supplemented by the main levee on the north bank giving a total channel depth of about 30 feet. The channel and levee slopes are continuous and protected by reinforced concrete paving. This paving is 10 inches thick and extends to a depth of 6 feet below channel grade. At this depth it connects with steel sheet piling driven to rock, except that in certain sections where rock is less than 10 feet below channel grade, a vertical concrete wall is substituted for the sheet piling. The channel is spanned by 5 bridges.

Between Terrace View and Santa Fe avenue the flow will sweep past the center of Pueblo where the greatest damage was done in 1921, like a gigantic mountain torrent. The velocity in this section will reach a maximum of 23 feet per second. below Santa F avenue the flood will spread over unimproved bottom lands to a width of about a quarter of a mile, the city being protected against backwater by levees connecting with the end of the Santa Fe avenue bridge. As a result of the sudden widening of the flood plane there will be the beginning at Santa Fe avenue, a drop-off in water surface of 15 feet in 250 feet, with resultant velocity of 27 feet per second.

Cost Not Exorbitant

To the casual observer the mammoth engineering feats of the conservancy district with the imposing structures everywhere in evidence would seem to saddle an enormous burden on the taxpayers of Pueblo. But such is emphatically not the case as every possible economy which would in no way detract from safety was affected.

Two bond issues were authorized and sold by the district, at the most advantageous rates offered under a competitive bidding arrangement, thought which bids were solicitude from practically every large bond purchaser i the country. The first issue was for \$3,417,000, and the second authorized in 1925 to make possible a greater measure of safety than was at first anticipated was for \$1,092,000 comparatively small sums in consideration of the magnitude of the program particularly when it is borne in mind that full protection was gained over a full year in advance of the most hopeful estimates.

The plan of payment of the bonded indebtedness, must of necessity be equable. It was readily seen to the board of directors and was apparent to the public as well, that property owners received the greatest benefit from protections should contribute the greatest share of the cost. At the same time, since the depreciation of a great section of the city practically the abandonment of it in fact, would work as unbearable hardship on the city as a whole, then the whole city should rightfully contribute to its own welfare. The cost was therefore apportioned so that city in its entirety including all property within the flooded district should bear one half of the expense while the remaining half was apportioned to the section flooded in 1921 in proportion to the benefits derived from protection against a similar catastrophe. Payments were extended over thirty years to spread the burden of taxation over as great a period as was practicable.

Carries Flood Easily

To the casual observer also, the new channel viewed from a distance seems but puny in comparison with the volume of water which ruined so many on the night of June 1st, 1921. Accurate figures taken by competent engineers show that twice since the completion of the major work of the conservancy plan the new channel has carried sufficient water to overflow the old channel, with consequent paralysis to businesses in the threatened district. Both high water periods, capable as they were of in 1924 to make a faithful ally, ready to meet the test of storm and flood.

In speaking of the accomplishment of the mighty task set the conservancy board, President Charles W. Lee stated "All of us spent sleepless nights during the early stages of the project. A few clouds gathering in the west, a brisk summer rain or the threat of lightening to the northward in the Dry Creek territory caused poignant anxiety lest our battle against time as well as against flood be lost. Happily the elements favored us until a measure of protection was

provided. I don't care to go through another such period, however."

"You can say this for me." he continued, "I was never so impressed with the value of human cooperation as I am today, over five years after the flood which unified the city. As Pueblo dug and clawed its way out of the muck, ruin and despair of those ante-flood days, something of a recompense for all the tragedy was noted in the spirit of unity developed in the citizens. Petty politics and partisanship was cast aside as a hindrance to progress of the whole city. I want to thank all those who helped with the project from the beginning. What was accomplished could never result from the work of one man or group of men. It took the toil and thought of hundreds to make the conservancy project an outstanding achievement. We of the board must acknowledge our inability to push through the completion of this mammoth project, without that spirit of loyalty and hopefulness which permeated the whole personnel.

"Never were we forced to ask for assistance in vain from citizens, firms and mercantile or manufacturing establishments. The railroads are also deserving of praise for their wonderful handling of a difficult problem, such as our transportation problem was. The conservancy work has ceased to be a nine day wonder to Puebloans in this year of grace, A. D. 1927 through their familiarity with all the components of the plan. But to visitors, engineers and laymen alike, it will always be new, a monument to an exceptional people, the citizens of Pueblo U. S. A.
