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FIELD NOTES
of
GEORGE H. PEPPER
1898.

Room #91. This room is situated over Room #3 and an opening was made in its Southeast corner in 1896 to make an entrance to the series of open rooms that run Northward from #3.

The lower room, #3, was heavily walled, the plaster in some places being fully 2" thick, and may have been used as an estufa or council room, but if so, the usual bench was missing. The opening was in the Southeast part and was surrounded, on the wall beams, with bunches of cedar bark tied with yucca cords, these were preserved and are with the material from Room #91.

The floor of this room was laid upon four large timbers that ran east and west, they were natural logs which measured nearly 1' in diameter. They extended about 1' into the Western wall, and protruded fully 2' beyond the Eastern wall. The two Northernmost logs were surrounded at their Eastern ends with strips of cedar that extended the whole width of the wall, which was 2' thick. These pieces were used as packing in the same way that small flat stones are used around smaller beams. The strips were not only in evidence on the lower part of the beam, but completely encircled it.

The Western wall of this room was rather uneven and had tipped towards the West until there was a distance of four inches between it and the top part of the Northern wall. It had been covered with a thick layer of plaster which remained in place over the greater part of the Northern half. Here, numerous layers could be noted. There was a closed doorway near the South end, or at least an opening that had been filled after the wall was built, but the lines could be definitely ascertained, owing to the delapidated condition of this part of the wall.

The North wall was completely covered with plaster, all but

the outer layer being in good condition. There had been a square doorway in the West central part but it had been closed, and was completely covered with plaster. This wall presented a very uniform surface and was 1' in thickness.

The Northeast corner was in good condition, the plaster being intact and solid. The East wall of this room was 2' in thickness and was made of good sized stones that were laid in the general way, no special plan being carried out so far as specialized manipulation is concerned. It was well plastered and presented a mostly flat surface, the joint with the South wall being firm and strong, although the South wall was not built into it.

The South wall was solid and in good condition, the surface had been plastered but the greater part of it had fallen. The doorway in the West central part was of the square type, and extended about 6" above the ceiling beams to the top of the standing wall. As there was fully 6" of adobe above the floor, the door evidently commenced at the floor level.

The stones in this wall were somewhat smaller than in the East wall but were laid in the same manner as were those in the other walls as near as could be ascertained. The walls of this room were standing, on an average of about 5' above the floor beams, being about the same level as those of the rooms West of it.

The beams composing the support for the floor were in good condition save where they extended into the room East of #91. In clearing out Room #3 an opening was found just East of the fire-place, but at that time the outlet was not found. In digging down to the beams in this room East of Room #91, a square opening was encountered that was probably the upper end of the air passage from Room #3. It was near the

Southeast wall of Room #91, and was left for investigation when the room in which it is situated was worked.

Room #92. This room is directly North of Room #91 and its exact direction is Northwest and Southeast, the same as Room #91, but for convenience the plans were marked North, South, East and West, the North of the plan corresponding to the actual North, West, East, the West to the Northwest, etc. This room was filled with the stones and dirt of the fallen walls to within about 2' of the floor, here the material from the upper floor was encountered, it could be kept separate from the deposit on the main floor as a stratum of sand had washed in and covered the floor to a depth of from 5" to 1', ere the floor of the upper room was buried.

The charred ceiling beams of the room were found throughout the debris and a great deal of corn was found on the fallen floor. A bunch of bean bushes was found in the west central part of the room, and masses of beans, from the same plant, that were still green, corn on the cob was encountered also beans in the pod. After the material from the fallen floor had been examined, the layer of stratified sand had to be removed ere the main floor was reached. The sand was almost as hard as mortar, and a pick had to be used to remove it. The flow had been from the southwest.

In the material on the main floor a jaw of a cinnamon (?) bear was found, also fragments of two other claws and a quantity of hair besides the general material from such a room. The room was a very dry one and the finds were therefore, well preserved. The floor was covered with adobe and there was a large flat fire-place in the West central part. The bottom of this fire-place was well smoothed, and only a trifle below the floor level. At one time it had probably been sur-

surrounded by a ridge about 3" high and 8" wide, but only a portion of it remained intact, this was on the North side.

The beam that supported the centre of the room was broken and had let that part of the floor down several inches, which caused a very pronounced slant toward the West wall.

The West wall (N.W.) was in about the same condition as the corresponding wall of Room #91, of which it was a continuation. It had retreated from the end of the South wall about 3" and from the North wall about 2". The surface had been covered with a thick layer of plaster but the greater part of it had fallen. The wall itself was a very poorly constructed one, being composed of small slabs laid in mud, with no attempt at facing. In the finished room the plaster was counted to cover up these defects.

The doorway in the central part was of the old type, narrow at the bottom and broad at the top, possibly, as has been suggested, to allow a person to enter with a bundle on their back: this doorway was filled with stones and dirt that might have been placed there by the old people, but which is probably the debris from the fallen walls. The North was probably plastered originally but hardly a vestige of it remains. This wall is solidly built, being composed of large faced stones chinked with smaller ones, it simply abuts the East and West wall and is nearly 3-1/2' thick. The only break in its surface is at the West end where there is a doorway. It is about 4" above the floor and of the usual rectangular type. The plaster on its Western side is still intact, but on the opposite side most of it has disappeared.

The wall at this side (E) back to the wall of the next room, which is a distinct and individual wall, is 2' 2". The lintel is composed of four heavy well preserved beams, each 5" in diameter. The places where they have been let into the walls are chinked with small stones and mud, as though the door had been put through after the wall

was built. The first lintel beam runs Eastward from the Eastern side of the doorway to a distance of 5' 4" and its entire length may be traced by a series of small stones that were placed around and in front of it. The chinking, on closer examination, shows that it had fallen out and in replacing it very little care had been taken, as the stones protrude beyond the side walls. A portion of the upper part of the wall, over the doorway, has fallen, but the other parts of this wall are in good condition.

The East wall is composed of good sized stones, which are well laid. Almost all the plaster has disappeared but the wall is in good condition save at a point below the doorway, where the stones are displaced. This doorway is of the rectangular type and is filled with debris.

The South wall is a very solid one and exceeding well made, it is composed of medium sized stones chinked with smaller ones, the chinking being forcibly noticeable around the doorway. This doorway is of the rectangular type and the sides are well laid. The wall had been plastered but very little of it remained. Below the door the wall had fallen, and, at the West end there was a space of about 3" where the West wall had fallen away from it. This wall is 1' thick and is separated by a large log that rests upon a comparatively thin wall.

Room #83. This is the room in the Southwest corner of which, the copper bell was found in 1897. A section of the first floor level was left in the above mentioned corner, and this was removed ere the second floor was disturbed.

On removing the second floor, which was composed of adobe and flat stones, a multiplicity of walls and fire-places was found. There was a fire-place near the East wall that was composed of flat stones,

around which had been loosely laid a ring of irregular shaped pieces of sandstone. In the centre of the room there was a complex mass of stone wall, part of which formed a fire-place, in the Southwest corner there was still another fire-place. All of these were photographed and measured, and a description will be found in Swanton's note book.

The space occupied by the different floor levels amounted to about 2'. The South wall was built upon a foundation of large stones that extended from 6" to 1' beyond the main wall. At this level, the foundation level, a semi-circular layer of stones was encountered and investigations proved it to be the outer wall of an old estufa. Work in this corner, Southwest, brought to light a well formed estufa of the circular type. The upper wall sloped outward to some extent and was well plastered. It was composed of large stones and was very crude as compared with the estufas of a later period in other parts of the ruin.

The bench was 3' 2" high, approaching in this respect the type found in the cliff houses. Those found in Bonito previous to this one, contained a bench that was comparatively low. This bench was well plastered and on the edge the plaster was rounded. The Eastern part of this bench was quite level, but the Western end of the exposed arc, dipped to such an extent that it left a regular ridge at the edge. In the construction of the bench a boulder had been utilized, its position being almost in the centre of the arc. The floor of this estufa is 8' below the first floor level of Room #83. Its Western wall was lost beneath the foundation of the West wall of Room #83, where it passes the Southeast corner of Room #84.

beyond this no explorations have been made. Its eastern part passes Southward under the South wall of Room #83, and it too is lost in an unopened room.

This estufa is but one of the evidences of a lengthened oc-

-cupation and belongs to the series that stretches Westward as far as Room #57 and #58. Below the floor of the estufa the virgin sand was reached, this point being 20' below the level of the ceiling beams of the first room.

Room #90 is in the northeastern part of Pueblo Bonito, and is bounded on the North by Room #89, on the South by the estufa Room #75, on the East by Room #20 and on the West by Room #82; it is one of a series extending East and west, and its walls, with the exception of the east, have fallen so that not even the entire first story remains.

The north and South walls are only a trifle over 7' in height. The walls are rough and in poor condition, especially the West end of the North wall; this wall contained two pockets and a doorway. The latter was of the rectangular type and was filled with debris from the fallen wall. The wall directly above it was completely destroyed, the space being filled with debris, the pocket in the Western part of this wall was rectangular in shape, its larger side ran parallel with the floor and a flat stone served as the bottom. It was about 1' 10" long and 10" high, extending into the wall a distance of 1' 9". The back part of its bottom was composed of flat stones, which looked like minor metates, these were laid side by side, their ends pointing North and South.

The pocket in the Eastern end of the wall was 1' 3-1/2" long by 9" high, and 1' 4" deep, it too had a flat stone extending the full width of the pocket and forming a bottom for the front part of it. Both of these pockets were comparatively rough but probably presented a better appearance when the plaster was in good condition. The whole wall had been plastered at one time and most of it on the upper part had fallen.

The South wall was in good condition and was composed of small

stones, being particularly small at the upper part of the West end. There was a doorway of the old broad type in the centre but it had been carefully closed with large stones and then covered with plaster. This was the only break in the wall as was the case with the North wall, only the lower plaster remains.

The East wall was rather rough in construction and its centre was pierced by a rectangular doorway that led into Room #20, most of the plaster had disappeared and it had bulged a little on either side of the doorway. The lintel of the doorway was composed of six poles but they were in an advanced stage of decay.

The West wall was strongly built and well faced, the only defect being a slight bulge in the centre. There was a small pocket in the lower part of the North end which looked as though a few stones had been pulled out, as there was no evidence of its having been used or plastered. A small patch of plaster remained near the floor in the central part and this showed evidences of fire and smoke.

The room is not due east and west, the East and West walls being 20° East of north. Nothing of great interest was found during the removal of the debris with the exception of the shell A-R-90. The usual potsherds, bones, etc. were encountered and when the floor level was reached a great many metates and stone slabs were found. When the dirt was cleared away the upright slabs were found to be the walls of bins, and to the north of one series was found the plaster that had once contained a series of metates.

The large metate Y- Room #90, had probably fallen from the floor above, as it rested on a layer of dirt that was over the best preserved metate rest. There was a pile of stones near the central part and resting against the South wall; these too had probably fallen from the upper floor the same as the flat metate in the Northwest corner. The large metate with a hole in the bottom, Z, Room #90, rested upon the

floor and was probably a part of the furniture of the room.

When the floor was cleared a series of bins was uncovered, they ran parallel with the walls at the sides of the room, and extended from the West wall to within 1-1/2' of the East wall. There were ten in all and were numbered commencing with the one against the West wall, the row was not straight but formed an elongated arc, the convex side of which was toward the North wall. The metate slopes were destroyed with the exception of the ones above #7-8-9, the ones above #7-8 were almost devoid of form but that above #9 was preserved enough to be measured. All the bins with the exception of #5, had flat stones for the bottom, these were surrounded with mortar that was rounded at the corners and sloped upward to the sides. The distance from the edge of the metate slope to the bottom of the bins, was from 2" to 3", the angle of the sloping surfaces could be ascertained in seven out of the ten bins, those above #4-5-6 were so badly broken that nothing could be found insitu from which to make calculations.

Room #93. is the second one South of the dark room and is one of the outer rooms at the northwest corner of the ruin. The longer axis of this room is Northeast and Southwest. The Northeast wall in the plan is marked east, the Southeast South, etc. The walls of this room were well made and were thicker than the average wall.

The north wall (N.W.) was composed of large stones chinked with smaller pieces of sandstone, and had a doorway in the Northeast end, and this was of the usual rectangular type, and had ten poles for a lintel. This wall was unbroken, save for the doorway, the wall was broken below the level of the ceiling beam at the Southwest end, but at the northeast end it reached a height of 20' above the floor. The ceiling poles were about 1' in diameter as evidenced by the openings that still remain in the wall.

The Southeast wall was composed of large dressed stones, the chinking being done with very thin pieces of sandstone. There was a doorway in the central part of the room and about 1' 1-1/2" below the ceiling beams, it was of the rectangular type and had poles, about 2" in diameter, for a lintel. In the northeast part of the wall there is an opening that has a flat stone for the top, it is nearly square, 1' x 16", and was probably used for passing things between the rooms.

This door opening was in good condition but the doorway was broken at the top. This wall was standing to a good height at the Southwest end but at the Northeast had fallen to the level of the ceiling beams. This wall was 1' 6-1/2" thick.

The Southwest wall is built in the same firm manner as the other two, and has the same form of chinking. There is a doorway of the rectangular type in the centre, it has poles for a lintel and is in good condition. The wall is standing to a height of 1' above the doorway, and is 1' 4-1/2" thick, it is not built into the Southeast wall but simply abuts it, as it does the Northwest wall.

The Northeast wall presents an unbroken surface, it is one of the walls that radiate from the outer wall, and stands to a height of 20' above the floor, it passes the Southeast wall and extends Southeastward forming the northeast wall of Room #101, and the Southwest wall of Rooms #100-104. It is built of the same large stones as the other walls of the room, and chinked in the same manner; it is 1' 7" thick.

The northwest or outer wall of the room, is 2' 2" thick, and being the outer wall of the ruin is solidly built. All the walls were devoid of plaster, but may have been covered when the room was new.

Owing to this being one of the outer rooms of the ruin, the walls on the northwest and Southeast sides are rounded to some extent.

A well smoothed floor was found but very little of interest was brought to light from the debris.

Room #94 is one of the outer rooms at the Northwest end of Pueblo Bonito, it is Southwest of and near to Room #93, and is bounded by Room #102 on the Southeast.

The north wall (N.W.) was in fairly good condition at the northeast end, but the southwest end had fallen and was simply a mass of debris.

There was a doorway in the upper part of the Northeast end that was almost square, but it too had suffered by the falling of the wall.

The Northeast wall was in fair condition, and was built of large faced stones which were chinked with small pieces of sandstone, this being the typical wall of the outer series, and standing out in strong contrast to the rough walls of the inner one.

There was a doorway in the upper central part, it was rectangular in form but was in a state of decay.

The Southeast wall was in fine condition and was built in the same manner as the other walls. It was bulged, somewhat, near the top but was intact.

There was no doorway in this wall and its surface was practically devoid of plaster.

The Southwest wall had fallen at its Northwest end, but the Southeast part was in good condition, and showed that it had been of the same workmanship as the other three.

There had been a doorway in the upper part and although still definable, was badly damaged. The floor of this room was well plastered, but about its centre there was a wall 2' wide that ran parallel with the end walls, its surface being on the floor level.

The thickness of the walls were respectively Northwest, Southeast, Northeast, Southwest, See numbers 115-118 in 4 x 5 Print book for pictures of this room, the former showing the Southwest wall and the latter the whole room.

Room #95 is the fourth one Southwest of the Old Dark Room, its true position by the compass is Northeast by Southwest, its longer axis being the one in question.

The walls of this room were almost completely destroyed, as though other forces than the natural elements had played a part in its destruction.

The north wall (N.W.) was completely demolished and only a portion of the opposite wall was in evidence, this was at the floor level and showed that it had been a strong well built wall at one time. The work was the same as the other walls of the outer series, being the chinked form.

The East wall had fallen save at the South end, where it was still intact, it was about 1' 6" thick and abutted the north and South walls, it was however, carefully built and was the same type of masonry as the other walls of the series.

The west wall was standing to some height where it joined the South and North walls but was only about 1' high in the centre. It was 1' 7" thick and composed of the same faced stones as the main walls. This wall abutted the north and South walls and had suffered with the others when this part of the building fell, as shown by a large crack in the centre. Only one plan could be made of this room and the thickness of the north and South walls was not determined.

Room #96 is the fifth one of the outer series stretching Southwest from the Old Dark Room. Its larger axis is 22' East of the

North, but for convenience sake, the walls are given as North, South, etc.

The North wall is composed of large faced stones which are chinked with thin pieces of sandstone. It is 5" high where it rests against the East wall but has fallen at the centre and west end. This wall is 1' 7" thick and is built upon a foundation of sand that is thickly sprinkled with charcoal.

The South wall is of the same solid character as the others, but instead of abutting at the South end it passes on and is embedded in the East wall, at the west end it abuts the outer wall.

There is a doorway in the centre of this wall which is narrow at the top and flaring at the bottom. The sides are 1' 7" thick and present a very even surface. There are eight poles that form the lintel, and they range 2" to 3" in diameter. This wall extends about 5' above the ceiling level.

The East wall presents an unbroken surface, composed of the same faced stones and chinked in the same style as the other walls. It stood evidently in as good condition as when built save for the slanting toward the West, which gave it a rather uncanny appearance to one at work below it. It stood to the height of the ceiling poles for over two-thirds of its length, but at the north end about 2' of its height, had disintegrated.

There is a wall about 7' in height standing above the ceiling level at the south end of this wall. It is about 3" East of the room wall surface at the South end, and fully 1' East of the surface where it ends, a distance of 7' 6" North of the South wall of the room. This upper wall is 1' 8" thick while the East room wall is -----

The west wall was massive in appearance at its South end, and for a distance of over 8' retained this characteristic, beyond this point the lower part of the wall could be traced for a few feet, but

beyond that there are no evidences that a wall had ever been in place, the space it had occupied being simply a mass of debris. Very large stones were used in the construction of this wall and it almost seems as though there must have been some other force besides the falling upper walls, to cause such an utter annihilation of so strong a piece of masonry.

At a point 8' 5" from this South wall there is a perpendicular line of stones that evidently mark the site of a doorway, its bottom stone is about 2' above the floor level, and above it, for 6", there is a regular chinked wall, therefore, this doorway must have been closed. The south side of the doorway stands to a height of 3' above the stone base or sill, and at this point the wall has fallen. The wall stands to the height of the ceiling beams for a distance of about 4' from the south wall and is 1' 9" thick; being the outer wall of the series it passes on toward the South.

The East wall of Room #96 is the eastern limit of the new walls. At the point where the south wall of Room #96 joins the East wall, the old and new walls are only 1' 4" apart. At the end of the upper wall, 7' 6" north of the South wall, the distance from the old wall to the inner room, surface of the East wall is 6' 6". The upper wall is 1' 3" thick and the bench formed by the top of the East wall of Room #96, West of the upper wall, is over 1', therefore, the east wall of of Room #96 must be over 2' 3" thick or else the upper wall is built partly upon the filling between the walls. The old wall behind Room #96 is made of flat undressed stones, and appears to be almost a dry wall. At this point it is 1' 2" thick. This outer series of rooms commences at the Northeast part of the ruin and extends to the extreme Southwest part. It was evidently built to round out the contour of the pueblo.

Room #07. This room is directly under Room #02 and is of the same form. It is almost due Northwest and Southeast on its larger axis, as shown by the compass.

The Southwest wall of this room is the Northeast wall of the square estufa, Room #3, and extends to the ceiling timbers where its top is formed by a beam about 8" in diameter, that extends its whole length, and enters the Northwest wall. Near the Southeast wall it is supported by an upright timber. This wall was roughly built and heavily plastered, the plaster in some places being 2" thick. This covered the irregular stones and gave the wall a fairly even surface. The wall was blackened with a grimy soot and its surface was almost covered with finger marks. To the Northwest of the doorway there were bear tracks, made by pressing the closed fist against the plaster, and then adding the toes with the end of the finger, nail marks were also to be seen and these were succeeded by snake like lines. The whole face of this part of the wall had seemingly served as a black-board when the plaster was still moist.

The surface Southeast of the doorway had also received attention, there were two perfect impressions of a hand, that gave very good paper casts, also a snake like series of finger-nail marks, and numerous other finger marks and scratches.

The doorway in this wall was a peculiar one, owing to its narrowness and great height. It had extended from the cross beam, at the top of the wall, to within 2' of the floor, but it now has its upper part closed with large stones and mortar, its sides are rounding and it has a flat stone for the sill. The Southeast side is comparatively straight but the opposite one is concaved near the bottom.

This wall is a dividing wall and simply abuts the Northwest and Southeast walls. The part to the Southeast of the doorway is in good condition, save in a few places where pieces of plaster had

fallen, but the Northwest part was bulged and cracked, and near the top there was a crack about 1-1/2" wide between the Northwest end of this wall and the Northwest wall, but at the bottom it is intact and not separated.

The Northwest wall had also been covered with a heavy coating of plaster but in many places, it had fallen, exposing sharp edges, irregular shaped stones. The fallen plaster had been displaced while the room was still occupied, for the exposed stones are covered with the same scales of grimy soot that blackens the plaster.

The doorway in the Southwest central part is of the rectangular form and has five 2" poles for a lintel, these poles as well as the sides of the doorway, have received the same layer of soot as the wall, and therefore, present a very dirty appearance.

The wall itself is solid and well preserved, the fallen plaster, however, gives it a very rough appearance.

The Northeast wall of this room presents a surface that stands out in strong contrast when viewed in connection with the walls just described. It is made of large stones chinked with smaller ones, and is about the same type of wall as that seen in the outer series of the West side of the Pueblo. The stones have been selected and the surface is therefore, quite even though the wall is devoid of plaster.

There is a doorway in the northwest corner that proves conclusively that this, the Northeast wall, is a new one, and that the other two, the Northwest and Southwest, are older. The Northwest side of this doorway is a continuation of the Northwest wall, and has the same blackened plaster and all the characteristics of that wall. It ends in an old smoke begrimed doorway that was the doorway of the old room. The lintel poles and in fact the whole opening is black, whereas, the lintel poles and the Southeast side of the new doorway is bright

and clean, as though but a few years old. There are six lintel poles in the new opening, ranging from 2" to 4" in diameter. The outer one extends 5" 5" beyond the side of the doorway, its whole surface being exposed in the face of the wall. A place was dug in the Southwest wall for the insertion of the lintel poles, and the space about them was filled in with small stones and plaster, whose whiteness stands out strongly against the black blackness of the wall. It is a rectangular doorway and the southeast side is unplastered, and is 2' 2" thick. The old wall beyond it is about 1' 4" thick and the doorway joins the new one at an angle, the slant being toward the Southwest.

The surface of the northeast wall had evidently never been plastered, it is bulged in some places and depressed in others, but not enough to weaken the upper wall.

There is a beam about 6" in diameter, that can be traced for a distance of about 6' from the Northwest wall, it evidently runs the whole length of the wall, as did the one on the opposite wall. As this is one of the old blackened timbers it could not have been put in when the new wall was built, nor could it have served as part of the Northeast wall of the old lower room, therefore, it must have supported an upper wall which was torn down when this part of the Pueblo was being remodeled. At the Northwest end of the new wall it emerges and passes Northwest at an angle until, where it enters the northwest wall, it just rests against the Northeast wall. This beam supported the ceiling poles which ran Northeast and Southwest, and its Northeast end, judging from the angle, probably enters the old wall near or in the Northeast corner.

The Southeast wall was irregular and of the wattle type. Its Northeast end was exposed, showing the upright poles and the bundles of willows tied to them. The space between the cross bunches of willows had been filled with stones and clay, and the surface plastered. This

had been a part of the old room, and had been plastered over when the new wall was built. The old blackened plaster may be seen where the wattle wall, that juts into the room, joins the Southeast wall.

There was a bench that ran from the Northeast wall to the jutting wall. It was built like the northeast wall and, as it is unplastered, was probably a part of the new structure.

The portion of the Southeast wall to the Southwest of the jutting piece, had been filled in with a new wall that was unplastered. The old blackened poles were in place on either side of it, and in the Southwest corner the old blackened plaster was in place. There was a doorway in the ceiling in this corner, and in the plaster near the top of the corner, there was a depression in the plaster to help in making an exit. The wattle beams, at the ceiling level, were tied with split willows and yucca cord.

The wall that jutted into the room was of the wattle type and ran to the ceiling level at the Southeast end, but was lower at its Northwest limits. It was a part of the old room and its sides still show the soot and smoke, but not as much as the side and end wall. It is composed of seven or eight upright poles that are bound laterally with bunches of willows, and tied with withes of the same material. At its Northwest edge there is a bundle of willows resting against the upright pole and over these is the thick plaster. The whole surface is thickly plastered, and on the Southwest side there are nail marks and scratches in its surface.

On the opposite side, about 1' from the Southeast wall and the same distance from the ceiling beams, there is a cup shaped place similar to the one in the Southwest corner of the Southeast wall. There was a bin in the Southwest recess, formed by two flat stones that had been placed on edge.

There is a large fire-place in the centre of the room and

another in the recess in the Northeast corner. Just Northwest of the latter there is, what has evidently been, a support for a post, it is composed of a platform of plaster, on which rest a ring of thin pieces of wood that stand on end, and which were probably the packing about the post; these sticks are enclosed in a jacket of plaster. For a further account of this room see notes of 1896, also photo.

Room #86 is bounded on the north and West by unworked rooms, on the South it joins Room #78, and on the East Room #87. It is one of the second series of rooms South of the north wall and is built much in the same manner as the outer wall at this point.

The north wall seems to have been repaired at its upper Eastern part, as the Western and lower part conform to the old style of building, being composed of large flat stones. This wall is still standing almost to the height of the third story.

The East wall abuts the North and South walls and is the same class of work as the Eastern part of the north wall, the whole three stories being composed of selected stones and well laid.

The South wall is new at its East end being made of faced stones, that present an oval appearance, chinked with smaller ones. This style of wall was seemingly restricted to the second story, the lower part was strong but not as well made as the upper part.

There was a doorway in the centre of the lower part of this wall, South, and West of it this wall is composed of rough stones, and is evidently an old one. There is evidence of its having been faced with small pieces of sandstone. This wall extends to the second story where it joins the East wall.

The Western part is in a state of decay and stands out more forcibly, as seen with the well made wall at the East end. The West wall is composed of the large flat irregular stones, such as are generally

found in the old walls. It abuts the North and South wall and its surface is very rough and uneven. None of the plaster remains on the walls, but they may have been plastered originally, and the old uneven ones undoubtedly were.

The North wall is 4' 10" thick, the East 2" thick and the South 1' 11". This room was cleaned to the floor level and then dug to a depth of several feet below that plane. A number of large stones and metates were found below the floor level.

Room #87 is bounded on the North by an unworked room, on the South it joins Room #80, on the East Room #88 and on the West Room #86. It is really one of the several series of rooms South of the North wall but there is a small angular space between the North wall of the room North of this one and the outer wall, this is formed by a wall that runs Southeast from the outer wall, and joins it at a point just abreast of Room #86.

Room #87 is standing to the height of the second story on the North side and also the North part of the East and West walls. The floor of this room rested upon a foundation of old walls, and was therefore, not as deep as Room #86.

The North wall is built mostly of small stones that are well laid, the surface stones are a facing for the rough inner wall and are laid without mortar, giving an appearance similar to the East wall of Chetirc Kettle.

There is a doorway in the centre of the first floor wall, of the rectangular type, the sides being very straight and even for unplastered surfaces. There is a weak place above this doorway but this is the only real defect in the wall. There are square openings at either end of this wall, they being 1' 6" below the ceiling beams, and about 8" from either end wall. The one in the East end is the better

one, but even it is in poor condition. They were probably about 1' x 1-1/2" and may have been ventilators. The ceiling beams ran North and South, as shown by the large beam holes in the wall. The upper part of the wall, above the ceiling beams, was made of the same size stones and built the same as the lower part. There was a rectangular doorway in the upper part, but the top of it had fallen with the wall.

There were three beam holes about 6" to 1' in diameter near the East wall, one large one about 1' 4" and two small ones about 8" in diameter in the centre, and two large ones midway of the Eastern and West wall.

The South wall was built about the same as the North and had a rectangular doorway in the centre. This is closed with stones that have been carefully laid; the wall is in good condition, and at the West end extends to the level of the ceiling beams.

The East wall is of the same work as the other two and there has been a doorway in the centre, but it is now entirely devoid of shape, the stones of the top and sides being displaced and the whole opening filled with debris. This wall stands to the height of the ceiling beams, and at its North end to the height of the North wall, which is fully 7' above the other level, (ceiling beam level).

The West wall is built the same as the other three and presents a solid unbroken appearance, it stands to a height of 4' above the ceiling beams at its South end, and at its North end fully 8' above that level. The respective measurements of the walls, showing their thickness is as follows: North 2', South 1' 10", East 2', West 2'.

On a level with the floor, as before mentioned, there are the tops of a number of old walls. On removing the floor it was found that the space was occupied with these walls, save an angular place in the centre, and the narrow end of another in the Northeast corner. These walls were thick and massive and were built of the large flat

rough edged stones that characterize the material of the old walls. The North and West sides of the large angular room still retain a good portion of the plaster with which they had been covered, and it was blackened as though by long use. There is a wall running parallel with the South wall of the room, and this joins another that runs Northwest and Southeast, near the east wall, this second wall abuts the West wall of this lower series, as does also the one first mentioned. The West wall does not rest against the West wall of the room, but the space between them is almost filled by the stones on which the upper wall rests.

The North wall seems to act as a support for the upper wall as is the case with the South one, and the East wall is built squarely across the top of the old walls. The room, or pointed space in the Northeast corner, extends under the east wall and forms part of the network of rooms below the floor level of Room #88. The East and West walls of this room, the upper one, abut the North and South ones, as do all of the end walls of this series, which extends to Room #99.

Room #88 is one of the same series, running East and West, of which Room #86 and #87 are a part. It lies just east of and adjoins Room #87. To the North of it there is an unworked room, on the East lies Room #89 and it is flanked on the South by Rooms #77-82. This room is about the same in general appearance as Room #87. The walls are built of the same material and in the same manner. The north wall has a rectangular doorway in the central part and about 1' above the floor, and in the upper part near the east and west walls, there are the same square openings as seen in the North wall of #87. These openings are the same as those in the outer wall of the Pueblo, and it is more than possible that this wall was at one

time the outer wall of the building. The square opening near the East wall had the lintel poles still in place, these were fully 3" in diameter. This wall stood to a height of over eight feet above the ceiling beams, and had a doorway in its upper part, but only a portion of the sides of the doorway remain in evidence, large pieces of the wall have fallen, above the square openings but the greater part of the wall is in good condition.

The East wall is solid, not even a doorway appearing to break its surface. It is bulged somewhat near the floor but is otherwise in good shape.

The South wall is in a good state of preservation near the East end and, in fact the only bad place is near the West wall, where a large section of wall has fallen out.

There is a closed doorway of the old T type in the East centre of the wall, and its lines are well defined. The stones, with which it is closed, are selected ones and were well laid. This wall has fallen and is now about the same height as the East wall, a little below the level of the ceiling beams.

The West wall shows the same broken place in the centre as on its side in Room #87. There may have been a doorway there but there is absolutely no evidence of it on this side, baring this defect the wall is in good condition, and stands to the height of the ceiling poles, which may be seen at its North end where the wall towers 8' above them. This high part is only 2' 6" wide at its lower part.

The East and west walls abut the North and South ones and all of them are devoid of plaster. In this room there is a continuation of the walls found at the floor level in Room #87, they form four places in this room, all of which extend into other rooms. The one in the West end extends under the West wall of the room and ends in an acute angle in Room #87.

The Southwest wall of the central room passes under the South wall of the upper room, as does also its Southeast wall. Just Southeast of the large space and having the same wall for its base, there is another angular room, its Northeast and Northwest walls form a right angle, the South upper wall being the hypotaneuse, the acute angle is lost under the East wall.

The fourth space is in the Northeast corner and with the East wall of the room as a perpendicular forms a right angled triangle, the base being on the North side. Unlike the walls in Room #87, these lower ones are only 1' thick, although their width is about the same.

The wall running Northwest and Southeast seems to end where it meets the North upper wall and it extends under the East wall at its other end. The wall in the Southeast end abuts this wall and passes under the South wall of the room. The wall running parallel to it in the West central part of the floor area abuts the same wall as the others, and also abuts a mass of masonry in the Southwest corner. These walls are all built upon the natural yellow sand.

There is a bench a little over 1' wide, that runs along the North wall and in it are four places where posts have probably rested, they average about 10" in diameter. The upper walls shows a thickness as follows: North 2"., South 1' 10", East 1' 10", West 2'.

Room #99. is one of the series of rooms that run East and West along the northern part of the Pueblo. It is bounded on the North by an unworked room, on the South by Room #80, on the Northeast by an unworked room, on the Southeast by Room #70 and on the West by Room #98.

This room on its shorter axis is about 20° East of North but the walls are mentioned as North, South, East and West for convenience.

The North wall is built of various sizes of sandstone pieces, in the lower part of the wall they are mostly small slabs, but above the ceiling level large stones predominate. The lower story at least was well plastered at one time, as shown by the plaster that is still in place on the lower part of the wall. There is one of the ventilators, post-holes, or whatever they may have been, about 5' 6" above the floor level and 10" from the west wall; it is about 1' 6" high and 1' wide, and is now filled with a well laid wall of small pieces of sand stone.

There are evidences of a second opening at the point where the Northeast wall joins this one, but its limits are undefinable, owing to the fallen condition of this part of the wall.

One of the finest doorways thus far observed in the ruin is situated about midway of this wall, its extreme measurements show 2' 1" at the top and 2' 4" at the bottom, and a height of 3' 3" on the East and 3' 3-1/2" on the west side. The sill is made of two large slabs of sandstone, one at each side of the wall, the small space between them being filled with small slabs and plaster. The lintel was composed of poles but only a few burned pieces remain in place. The stone sill protrudes into this room about 2-1/2" but the mortar had been applied to the under part, which was almost on the floor level, thereby, making a solid front. 4" North of the face of the wall, the doorway lessened in width by a wall on either side. This wall averages about 4" in thickness and slants towards the north. The base is, as before stated, 4" North of the face of the wall, while at the lintel level it is a little over 1' from the same plane. The lintel beams are 2' 7" above the sill and seems to have extended only a few inches South of the jog in the sides of the doorway. The whole doorway with the exception of the sill, had been covered with plaster, and that on the sides was quite thick and in almost perfect condition. The sloping

sides were the means employed for holding the stone door in place, as the sloping surface would preclude the possibility of its falling, and then too in case of an attack, could be readily applied to prevent intrusion. The slanting wall extends to the Northern limits of the main wall and the plaster is there rounded to form the sides of the doorway. As this side, the North, is so much smaller than the South side of the doorway, and, as there is seemingly no way of fastening this side, and again as the openings in the upper part are the same as those in the present outer wall, it would seem highly probable that this wall was at one time a part of the North wall of the building, or main Pueblo.

The South wall, or at least that portion below the ceiling beams, is built in the same manner as the north wall, the spaces between the large stones however, show more chinking than in the other wall.

There is a doorway in the centre of the wall, it is rectangular in shape and the sill is a stone nearly 2" thick, that extends the whole width of the doorway. The lower part of the sill is 1' 4" above the first floor level. The doorway has been closed with large stones, and the surface was plastered, the same as in Room #60. The sides are of the regular form and still retain a good coat of plaster. The wall above this doorway has bulged a little, but where the upper wall joins it, it forms a bench nearly 6" wide. The bench tapers toward the East and west and is lost in the wall at a point about 3' West of the Southeast wall, but is still in evidence at the west end.

The greater part of the surface below the ceiling beam level is covered with plaster, West of the doorway it is black and crumbling from the fire that raged in this end of the room.

The second story wall is built of smaller slabs than the lower part, and there are evidences of ^{three} doorways in its surface. The one near

the west end is of the rectangular type and is still standing. The one in the centre is only recognizable by a portion of the West side that remains. The third is a corner doorway about 4" from the Southeast wall, it runs Northeast and Southwest, and its sides are built of large faced stones, it is standing to a height of about 2'. This wall abuts the Southeast one and thus shows the eastern limit of the South wall of the series that has been explored as far West as Room #36.

The Northeast wall is a cross wall that abuts the North and Southeast ones, it is evidently of the same period as the other walls and is of the same type of masonry. It runs Northwest and Southeast and most of the plaster with which it was covered, is still in evidence.

3' 9" above the first floor level and 1' 2" Southeast of the North wall, there is a pole 2" in diameter that protrudes 1' 2" from the wall. 1' 1" Southeast of this pole and about 2" higher, there is a piece of deer antler embedded in the wall, and it was probably used as a peg.

In the Southeast corner, about 1' from the floor level and 1-1/2' from the Southeast wall. the end of a log, about 5" in diameter, protrudes, about 2" from the wall, 8" Northwest of this one and on the same level, there is a smaller one that also projects about 1-1/2".

Two stones break the smooth surface in this part of the wall, otherwise it is comparatively even. There is a break in the plaster about 1-1/2' from the Southeast wall near the ceiling level, and it has brought to light the outlines of what seems to have been an old doorway. At its lower limits there is a beam that shows about 6" of its surface, but what office it holds in relation to the old opening, which is now closed with stones, is not evident. This wall is standing to the level of the ceiling beams and is in fairly good condition.

The Southeast wall presents the best surface to be seen in the

room. It is built of large faced stones and chinked with unusually thin pieces of sand stone. Almost all the plaster below the ceiling level is intact, and the only breaks in the surface are doorway and a wall pocket, the latter is 1' 10" above the first floor level and is 6" high, 9" wide and 11" deep. A large flat stone forms the top while the bottom is formed by parts of two ordinary wall stones. The bottom and sides are covered with a heavy coating of plaster. This pocket is 1' 5" Northeast of the South wall.

1' 1" above the top of the pocket, there is a doorway, it is almost as wide as high, and the corners are rounded with a heavy layer of plaster, the top and base were in bad condition as a great many of the stones had been loosened by the fall of the debris from above. This wall runs Northeast by Southwest, and forms the East wall of Room #60. The ends of small poles still remaining in the side walls of the doorway, show that the lintel had been of wood.

The West wall is in good condition and towers fully 10' above the level of the ceiling beams. The masonry is the same as in the other walls, and the only break in the surface is caused by a rectangular doorway in the central part, but it has been closed and plastered over. A little plaster remains in the lower area but most of it has fallen. There is a slight difference in the thickness of the wall above the ceiling level, as shown by a narrow ledge which is about 2" wide and extends the whole width of the wall.

The Northwest corner of the upper part has fallen, but enough remains to show that there has been a corner doorway. This wall abuts the North and South walls and is the last wall of this series that runs at right angles to the others.

There were three floor levels in this room, the first being a little below the sill of the doorway in the North wall, the second

was about 3" below this, and the third was 9" below the second. All of these floors were hard sand surfaces and the spaces between them were filled with clean yellow sand.

1' 11" from the joint of the Southeast and South walls, and 1' from the Southeast wall there was a stone step which was placed in position after the second floor was made, as there is no break in the lower floor. This, with the wall pocket, which was probably used as a step, was used to reach the doorway above the stone in the Southeast wall.

The thickness of the various walls is as follows: North 2', South 2', Northeast 1' 8", Southeast 1' 7", West 1' 8".

In the Northwest corner there was a layer of drift sand that was about 4" thick against the West wall, upon this rested the eleven pitchers that came from the Northwest corner of the room. As this sand was stratified it must have run in after this room had passed into disuse. Then the pitchers must have been placed upon this sand, and more must have washed in for the pitchers were partly buried and stratified sand was found in them. Another evidence that they were partly covered when the roof fell is that the part exposed shows the action of fire and smoke, whereas, the lower part is unburnt. The bird form having the old doorway type of opening, was found in the burnt material of the upper levels, and shows how carefully the Indians work. The fragments of this piece of pottery were scattered over an area fully 10' long and the width of the room, the difference of the levels at which the pieces were found, being over 4'. Piece by piece Bowerlo brought in the pieces until all were found save a few fragments from the bottom. From this room came also the painted sticks and painted board.

Room #100 is situated in the Northwest part of the Pueblo and is one of the new rooms of the outer series, at least the North part

is, for the South half is very old. The North wall is part of the outer wall of the Pueblo, and is built of selected smooth faced stones being chinked with thin layers of sandstone. The wall was not only well built and solidly put together, but the foundation was such that it stands to day almost, if not quite, as perfect as when it was built. The ceiling beams are 11' above the floor level, and the wall towers 4' above the beam level.

The wall has no doorways the only breakage in its entire surface being the six ceiling beams, whose broken ends extend beyond the face of the wall.

The East wall of the new part extends Southward a distance of 8', where it joins the old wall. It is made of the same type of material as the North wall, and is standing at its North end to the height of 15'. There is a doorway in the North end that is 1' 10" above the floor and 1' 9" South of the North wall, it is rectangular in form, and is 3" wider at the bottom than at the top. The sill is composed of flat stones, and the lintel is formed by seven poles that average 1-1/2" in diameter. There is a peculiar place about midway between the doorway and the South end of the new wall, and about on the level of the upper part of the doorway. There had been a slight depression in this part of the wall, probably 1' square, and this was filled with plaster after the wall was completed, while the plaster was still soft, thin pieces of sandstone had been forced in so that only the edges showed, which gave a very peculiar surface. Some of the pieces were removed and placed with the material from the room.

The old wall, that forms part of this room, extends Southward a distance of 9', thereby making this side of the room 17' long. The foundation stones of this wall are over 3' above the floor level of the new room, these stones are large flat pieces of sandstone and rest upon a stratified bed of yellow sand, about 1' above the floor level

of the new room there is a stratum of charcoal about 1" thick which extends on about the same plane, almost the entire length of the exposed sand. The wall itself is of the oldest type found in the ruin, it is composed of large flat uneven stones, that in many cases have sharp edges. These were laid with a thin layer of plaster between them and the space between the ends filled with plaster, the whole face of the wall was then covered with a layer of plaster and thin pieces of sandstone. This facing gave the whole surface of the wall the appearance of being chinked, as the stones protrude from the plaster as though they had been forced only part of the way in. This facing has fallen on the greater part of the wall, but on the lower part and at the South end, it is intact.

This wall stands to a height of 11' 6" above the floor level of the new part, and has a break near the South end that may have been a doorway.

The South wall is built in the same manner as the last one described, and has been faced in the same way. The foundation stones are large heavy pieces of sandstone, and extend even below the floor level of the new part.

There is a bench 1' 3" wide and 3' above the floor level on which this wall rests, from this bench to the ceiling beams the facing has fallen save in the East corner near the beams. Three of the beams from the room South of this one protrude from the wall, two of them being over 2' long. About 1' above these beams can be seen six openings where the roof timbers of the room had entered, these places were from 3" to 4" in diameter, and the wall all about them was blackened from the smoke made by the burning beams. The wall above these beams is the same as the lower part but the facing was of even smaller stones than that of the lower part, or of the East wall. This wall is standing to a height of about 16'. About 3' above the ceiling level of

this room the ends of five sticks can be seen. These were no doubt the ends of the ceiling beams of the upper room of #104. The wall is abutted by the east and west walls and extends Westward, forming the South wall of Room #101.

The West wall is a solid one and forms one of the finest squares of masonry to be found in the Pueblo. It is built of selected faced stones and is carefully chinked. The only break of any consequence is near the centre and just above the ceiling level; here a few stones have been displaced but not enough to mar the solid appearance of the wall.

The east wall of the new part rests upon a wall that may have been a part of the old building, it projects into the room about 2' near the North wall but seems to have no relation to the present room.

The ceiling of this room, the new one, was made with the individual willow strips such as were used in all the rooms of this outer series. The ceiling over the old part had almost been covered with willows, but the ceiling above was made with slabs to support the adobe.

The measurement of the various walls gave a thickness for each as follows: North 2' 5", South 1' 1" and above the upper ceiling beams 1' 3", East wall of new part 1' 5", East wall of old part 1', West 1' 6".

This room is just West of and next to the old dark room and East of Room #93 and #101. It is North of Room #104 and its North wall is the outer one of the Pueblo.

Room #101 is situated just Southeast of and adjoining Room #93. It is one of the new series of rooms and is bounded on the Southeast by Room #107, on the Northeast by Room #100, and on the Southwest by the angular space between the old and new wall, which was not worked

out. The Northeast wall is a typical one of the new form of masonry, and extends from the Southeast wall of this room to the outer Northwest wall of the ruin, forming the Northeast wall of Room #93 in its course. It is built of the same kind of faced stones and is chinked in the same manner as the other walls of the series. The surface is devoid of plaster but is solid but is solid and perfect from the floor to the top, which is the same height as in Room #93.

The Southwest wall is a small division wall that abuts the old and new wall. It is of the new style of masonry and its surface is unbroken. There is a jog at the level of the ceiling beams about 5" wide which lessens the width of the upper wall. All the lower part of this wall is blackened but the part above the ceiling beam level is the natural color.

The Northwest wall is of the new style of work and is in good condition save at the upper central part where the upper portion of the doorway has fallen.

The doorway is of the rectangular type and although the outlines are discernable, it is in a fallen condition. The only break in the wall, barring the doorway, is an opening near the Northeast wall, it is about 10" square and has a flat stone for the top and two of the regular small stones for the bottom. It extended into the next room, Room #93, and was either for ventilation or for a doorway of communication between the rooms, probably both.

There is an opening about 1' above the passage way where a beam has entered, it is about 10" in diameter. Near the Southwest end of this wall the ends of about fifteen ceiling beams may be seen, this wall abuts the Northeast one.

The Southeast wall was the old outer wall of the Pueblo, it is made of rough uneven stones and the surface is composed of a facing of thin pieces of sandstone with only the edges showing. This wall is

rounded to some extent while the Northwest wall presents a straight surface. The upper part of this wall fell during the progress of the work, and therefore, no record of its surface peculiarities could be obtained, the lower part, however, remained and this rested upon a foundation of large flat stones.

The work in this room was carried to a depth of several feet below the floor level. The walls showed a comparatively uniform thickness, the measurements being as follows: Northwest 1' 7", Southeast 1' 5", Northeast 1' 6", Southwest 1' 6".

Room #102 is a large one of the old outer series in the Western part of Bonito, and is bounded on the northwest by Room #94, on the Northeast by Room #107, on the Southeast by Room #108, and on the Southwest by Room #103. The South wall (S.E.) has a doorway in the lower central part, it is 5' 4" above the floor and of the rectangular type. The top floor has fallen but the sides are in good condition. They are well plastered and the plaster is rounded. This wall is built of rough stones which are flat and have uneven edges. The surface was evidently covered with a heavy layer of plaster at one time, which covered all the irregularities formed by the irregular stones.

At the North end the corner was rounded with stones, there were no other breaks in this wall, and all of the other walls were plain, there being no doorways or other openings in them. All the walls were built of the same flat stones and presented quite a contrast when viewed in connection with the uneven walls.

The northeast and Southwest walls were quite thin and abutted the Northwest and Southeast walls. One of the ceiling beams is in position near the Northeast wall, and others were found near it but they were broken. The walls showed a thickness as follows: Northwest 1' 6" (approx. not dug out), Southeast 1' 5", Northeast 1' 2", South-

-west 10". This room was seemingly filled with refuse stones and debris, and in the mass a number of dog skeletons and part of a bean were found.

Room #103 is another of the old outer series, it is separated from Room #102 by a thin division wall, and is bounded on the West by Rooms #94-95, on the East of it lies Room #109, and on the South by an unworked room.

The North part of this room had been cleared to the floor level by other parties, and our work consisted in the removal of enough of the remaining debris to make sure that there was nothing in the room.

There was a doorway in the South wall but its limits could not be defined. The other walls had no doorways. The walls were built of large flat stones and the walls were even more unstable than those in #102. The plaster had not only washed from the surface but also from between the stones, thereby, leaving practically a dry wall.

The people evidently considered the room unsafe, and therefore, filled it with adobe and stones. At all events these were the materials encountered, and they were packed in in such a way that there must have been a method in the filling. The floor level was over 15' below the surface, and the ceiling was 11' above the same point. The thickness of the various walls was as follows: North 10", South 11", East 2', West x.

Room #104 is a small room just South of Room #100, the South wall of #100 forming the North wall of this room. This wall is one of the old series and is built of large flat stones, as described under Room #100, on this side however, it is covered with a thick layer of plaster that is rounded at the bottom, thereby, making the floor cup shaped at this end. This wall is 11" thick from the floor to a height

of 3' 3" above it, from this point to the top it is 1' 1" in thickness on the average, but in some places it projects beyond the lower wall over 6". The plaster on the surface of this wall is in good condition save at the upper and lower part of the West end.

The East end abuts the east wall but it passes the West wall and forms the North wall of Room #107. The South wall is also a roughly built wall and is covered with plaster, which conceals the sharp irregular edges of the stones. It abuts the East wall but extends Westward beyond the west wall. It is 9" thick and well preserved for an old wall.

The east wall is also of the old series and built in the same manner as the other two, 1' thick. Its surface is covered with plaster and most of it is in good condition.

There is a bulge near the north wall and the wall is standing only 2' above the floor.. The plaster is rounded at the bottom the same as on the North side, the wall extends from the South end of the new east wall of Room #100 to the South wall of this room, here it joins the thick east wall of Room #111.

The West wall is a division wall and is of the new type of masonry, it abuts the North and South walls, and is composed of very large and thick stones and chinked with uncommonly large pieces of sandstone. It is 2' 2" thick and has no plaster on its surface, and is one of the thickest walls noted in the ruin.

The floor is heavily plastered with adobe and is rounded or cupped, on the North, East and South parts. There is a large post in the Southeast corner, it is 7-1/2" thick and stands 2' 3" above the floor. It was probably used as a step in getting out of the room, the doorway probably being in the ceiling. The beams under the overhanging part of the North wall were seemingly placed there to support the upper part for there are no holes in the wall opposite, and everything points to the

fact that this ceiling was much higher than this level. These beams are all broken but they probably extended no further than the edge of the overhanging wall. The two beams in the East end of the wall have fallen out, but the angle of the holes in the wall would show that the beams, had they been long ones, would have reached almost to the floor on the South side of the room; then too there are some willows in place over the beams that seem to indicate that the space between the beams and the wall stones was filled with willows, and then plastered.

The walls had fallen to such an extent that the ceiling level could not be located.

Room #107 is just South of Room #104 and North of Room #102, to the West lies Room #101, and to the East Room #108. Three walls of this room belong to the old period but the North wall is new.

The North wall is built of large pieces of sandstone and chinked with quite large pieces of the same material. It is a very strong wall, abutting the East and West walls, and its surface is unbroken. Its use was evidently to brace the thin walls at either side of the room. It was evidently built the same time that the North wall of Room #101 and Room #93 was put up. Its surface is devoid of plaster and, as there are smoke streaks on the stones, it probably was left unplastered.

The South wall was a thin partition one of the old type, the rough irregular stones of which it was made being covered with plaster. There was no doorway in this wall and the ends had been built into the East and West walls to give it strength.

The East wall was built of various sized flat stones, in the South and upper parts small ones predominated, but the North part, both above and below this doorway, was made of large slabs. There is a

doorway in the North central part that has a board for a lintel, it is of the rectangular type but has the plaster of the sides rounded.

About 1' 6" above this doorway the ends of three ceiling beams protrude from the wall, the wall extends about 4' above these beams. This wall had been heavily plastered at one time but most of the plaster on the upper part has fallen. On the lower part almost all of it is in place. The North end of the wall is lost behind the heavy abutting North, it formed the east wall of Room #104, where it joins the south wall. The plaster is rounded.

The West wall is composed of large flat irregular stones and most of the plaster has been washed from between them. There are no openings in the wall and it is in poor condition for even an old wall.

The floor was still in place and on it were found a number of interesting arrow fore-shafts, also a stone knife in the handle. This floor on being torn up showed first a layer of adobe, below this came a layer of cedar bark and then another smoothed adobe surface, into which the cedar bark had been partly pressed by the upper adobe stratum. Next came more cedar bark, then a layer of split pine(?) boards, or slabs, these rested upon the finest series of poles that have been noticed in the ruins. These poles ran North and South and in turn rested upon a series of logs, extending East and West, that almost filled the space, as did the poles, above them there were four new timbers which were, on an average, 5" in diameter, all but one of which had been broken by the weight of the debris that rested on the floor.

The old series of beams, which were blackened by smoke and soot, were seemingly cottonwood poles of various sizes, shapes and conditions, these were decayed and the new timbers were probably put in when the general changes were in progress in this part of the Pueblo. All of the ceiling poles were saved, also specimens of the new and old timbers, and some of the split slabs.

Room #107, the lower part of this room was similar to the upper part, the North wall extended to the floor level, and its surface was as well made as at its upper part, and there were no breaks in its surface as in the upper part. Its surface was devoid of plaster.

The South wall had an unbroken surface and was covered with a thick layer of well smoothed plaster, it was so smooth that it was particularly noticeable.

The east wall was built on a foundation of large flat stones that formed a bench 2' 6" high and 1' wide, the surface of this bench was made of slabs of sandstone stood on edge, and the upper and Northern parts were plastered. There is a doorway just above this ledge and about 2' 6" from the North wall. It is of the rectangular type and there is a ring of plaster about 6" wide that extends around it and forms a rounding surface at the edges of the doorway. This wall was well plastered and in its upper part there were there were two pegs. The South corner is rounded and the plaster is very thick at this point. The doorway has a lintel composed of poles.

The West wall is made of large flat flat pieces of sandstone and almost all of the plaster has washed from between them. There is no opening in its surface and its condition is practically the same as the room above.

The floor was of the usual adobe and there were no fireplaces in evidence.

The walls of the upper and lower rooms were practically the same in width and measured as follows: North 2' 2", South 1' 2", East West 1' 3". The North and South walls were straight but the other two showed quite a curve.

Room #105 is situated just west of and adjoins Room #25, it is a well made room and is a part of the new section that extends along the Western part of the Pueblo. It had evidently passed into disuse for it was used as a rubbish pit and was filled with this material.

The North wall, below the ceiling beams, is built of the typical large faced stones but the chinking is of much larger pieces of sandstone than the new masonry in the Northwestern part of the ruin. It abuts the East and West walls and has a very high rectangular doorway in the lower central part. There are no other openings in the walls^{and} save for a small place about the doorway the wall is in perfect condition. The doorway is filled with sand and rubbish and the lintel is composed of poles. This wall may have been covered with plaster but none of it now remains. Part of the upper story wall is still standing and in it there is a doorway of the rectangular form, that has eight poles for the lintel. The wall itself is of the same type as the lower part but most of the stones used for chinking have fallen out. This wall has been exposed to the elements and therefore, presents a much warmer surface than the walls of the lower room.

The South wall is really a counterpart of the North one, it is built in the same manner and of the same kind of material, and has a high doorway in the lower central part. This doorway has a double lintel, a space of about 4" intervening, this space was filled with mortar. The lintel poles are much smaller than in the North doorway, being only 1-1/2" in diameter. The West edge of the doorway was straight and well squared, but the opposite side was bulged near the bottom, thereby, ruining whatever symmetry it may have had. The sides were not plastered and the opening was filled with stones and rubbish. The Western part near the ceiling level, was cracked and badly broken, and there was quite a space at the beam level where the stones had

fallen out. There was no plaster on this wall, and baring the defects mentioned, it is good condition.

The second story wall is still standing to a height of about 8' and, save in a few places where individual stones have fallen out, presents an unbroken surface. It is built of faced stones and, as in the opposite wall, most of the chinking has disappeared. This wall (South) abuts the East and West walls, and as a partition wall, is very solid.

The East wall is a very solid one and presents as fine a specimen of alternating layers as can be found in this part of the ruin. Layers of large faced stones are sandwiched between broad layers of well laid small pieces which gives a very pleasing effect as well as forming a very good wall, the best work in the upper Northern part. There has evidently been a doorway in the lower centre of this wall but all traces of it have been destroyed by the stones being either torn out or having fallen from their places, at all events, at present there is only an opening about 4' high by 2' wide, that breaks the otherwise perfect surface of the wall.

There is a jog at the North end of this wall that runs in a Northwest direction and thereby, cuts off a corner of the room. This wall, the angular one, originally formed the West wall of Room #25 and part of it still projects into that room. As the wall of #105 really abuts this wall, or in other words marks the starting point of the gas wall of #105 and extends on Southward. The walls are built into each other and there is therefore, no break where they join and the workmanship is the same.

The main wall is not plastered but the lower part of the angular wall is covered with quite a heavy layer. About 5' from the floor and 10" from the jutting wall there is in the angle wall, an opening where a stone has fallen out, through this place a beam fully

5" in diameter may be seen, it is placed horizontally in the wall and was evidently put there to strengthen it. The whole east wall, including the angle part, stands to a height of 1' above the ceiling beams, six of which protrude from the wall.

The West wall is solidly built but is warped to such an extent that the surface presents a series of waves. There are a few stones that have been detached in various places but otherwise, the wall is intact. There is a rectangular doorway in the central part that is filled with a well laid wall, its sides are unplastered and the edges are well squared, but the masonry is so nearly like that of the main wall that it almost seems that it was closed when the wall was made, and that the opening was simply made in order that they could use it if they cared to at any future time. There are eight lintel poles in place that average 3" in diameter. The only portion of this wall that is standing above the level of the ceiling beams is at the South end, here a piece about 3' wide reaches a height 6'. The surface of this wall is devoid of plaster.

The floor of this room was rather uneven but was hard, as is the case in most of the rooms. The walls were uniform in thickness and showed the following measurements: North 2', South 1' 11", East at North end 4' 3", East at end of main wall 2' 4", East at South end 2' 7", West 2' 3-1/2", Centre, 2' 5", Angular wall 1' 7".

Room #25 was another rubbish room, it was directly east of Room #105. The upper or new part was built of large stones and chinked. North, upper wall, composed of small faced stones and chinked with very small pieces of sandstone. Has an opening in lower east part, may have been a doorway, looks more like a hole made by proprietors.

Wall below floor level made of irregular stones of large size, roughly made and chinked. South upper wall solid and well laid,

large stones, chinked with large pieces, abuts east and West walls, stands to a height of ceiling beams, surface unplastered and unbroken.

East wall, upper, made of large faced stones chinked with small pieces, has rectangular doorway in centre, has nine poles for a lintel. No other breaks in this wall, is unplastered and abuts North wall, ceiling beams in place at top.

West wall has alternate rows of large and small stones, small stones predominating, break in South part, probably site of doorway. There are four holes about 4" square, all about 5' from floor, may have been used as pockets, no corresponding one in East wall, two are on North of opening, two South of it, North two about 4' apart, South two about 2' apart, ceiling beams in place at top of wall. 3' 10" from North wall it abuts an old wall that runs Northwest and Southeast.

The angular place formed by this wall was filled in however, making a perfect unbroken surface. The filled in part was over 1-1/2" thick. Against the North wall, below the floor level the old part was found.

The angle wall, that forms a part of Room #105, Northeast part, extends Southeast and passes under the South wall. It is built of large rough stones and chinked. 1' 9" South of the room surface of the South wall, and under it, is the South wall of the lower room, it abuts the Southwest wall and extends eastward past the East wall of the lower room. Like the Southwest wall it is built of large uneven stones and in some places is chinked, but the chinking is irregular. The East under wall is built of large stones, and chinked, the chinking being more noticeable near the North end. In the Northeast corner there is an opening where a beam has rested, it is 4-1/2" in diameter, and extends into the wall 11", it is plastered and the plaster is filled with

pieces of sandstone that have been pressed into it while it was moist. This hole is about 2' 6" below the floor level. The East wall abuts the North one: this under room was filled with stones and dirt to the level of the floor. The thickness of the South wall is 1' 3", the other walls could not be measured.

The walls of the upper main floor gave the following results when measured for thickness: North 1' 11", South 2' 5", East 2' 6", West 2' 2", for other measurements of West wall see Room #105.

Room #106 is situated just East of Room #25, its North wall forming the South wall of that room. Work was commenced in the Southeast part and had been carried to a depth of but a few feet when a copper bell was found.

What had at first appeared to be one large room, soon proved to be two rooms for a division wall was found as the work progressed. This wall was about 4' 2" West of the East wall and proved to be only 4' high, its foundation being the debris with which the room was filled. It averaged 1' 3-2/5" in thickness and was not a well built wall.

When #106-B was worked the division wall had to be removed for safety sake. When all the debris had been removed, a very pretty room was seen as the walls were so even and well laid. The material in the room was simply the waste material from the houses, but ere the Western part was completed, a second copper bell was brought to light, this was found near the floor level and only a few inches from the West wall.

The North wall of this room presents as perfect a surface as one would wish to see, it is made of large smooth faced stones and chinked with small pieces of sandstone, and although a great portion of the plaster is still in place, the wall would have been an ornament to any room without

being covered. There is not a break in the surface, and it is one of the most even to be found in the Pueblo. This wall abuts the East one but its West end either passes the end of the West wall, or else that wall is built into it, a point that can be determined when the next room is worked.

The South wall is a division wall and abuts the East and West walls, it is made of large faced stones and is chinked after the manner of the North wall. There is a round piece of sand stone embedded in the lower West central part of the wall, more properly speaking, it is a cylindrical piece with the faced end forming a part of the wall. There are a few loose stones in the central part but otherwise, the surface is unbroken; this wall also retains some of its plaster.

The East wall is built of smaller stones than the North and South walls, and there is an absence of the pronounced chinking. There is a rectangular doorway in the lower central part that is filled with well laid stones, the stones above the doorway have fallen, thereby, loosening the wall above, and this has caused a collapse that has greatly damaged the upper central part of the wall. Most of the plaster is still in place, and the wall has been a very solid as well as pretty one.

The West wall is similar to the East one in the form of its masonry, the stones are slightly larger but there is the same absence of chinking. There is a door in the lower central part that is filled with rubbish, it is of the rectangular type and the lower part has been filled with stones. From the extent of the sides it seems that it at one time extended below the floor level, a great deal of the plaster is still in place on the lower part.

The position of the ceiling beams could not be ascertained as the walls had fallen below the ceiling level. The floor was rather uneven and there were fire-places in the East central and Northeast part. The walls showed a thickness as follows: North 2'5", South East West.

*The bin was
the wall
in the room*

Room #85. In the Southeastern corner of Room #85 there were two bins or small rooms that were probably used for storing grain or other material. The one in the corner itself was formed by a $1/4$ " wall that formed the arc of a circle, the radius of which was about 3' 9", taking the corner as the centre. The South wall of this bin formed by the South wall of the room, was well plastered and its surface was unbroken save for five depressions that had been made for beam rests, the largest of these was near the West wall of the bin and was over 5" in diameter. The other four were near the East wall, three of them being in a group, one of them was circular with a diameter of $3-1/4$ " while the other two were simply depressions that were lengthened as though the plaster had been removed with the cupped fingers; the fifth was 1' 1" above the highest of the group and was not very deep.

1" from the South wall and 4" from the East there is a post $3-1/2$ " in diameter and 4' 5" high. Another post 6" in diameter stands in the Northeastern part of the bin, its top has decayed and part of it has probably fallen, but as it stands, it reaches a point $1/2$ ' above the ceiling beams. Another post 7" in diameter and 1' 6" high stands in the Northern part of the bin, the top is smooth, as though from use, and, as it is directly under the doorway to the bin, was evidently used as a step.

The East wall of the bin is well plastered, the plaster being intact over the entire surface. There are four depressions for poles that are on the same level as the ones in the South wall, three of them were but slight places that had been picked into the plaster, the other is deeper and still retains a thin layer of plaster that had been applied to the wall after the hole was made.

The $1/4$ " circle that forms the third boundary of the bin is made of rough stones over which a thick layer of plaster was spread. It extends from the floor to the ceiling beams where it joins the South

wall and may have extended to that height throughout the Southwest part of the circle, but the North part of the circle would not point to such a possibility. On a line with the highest depression in the South wall there are in the circular wall three charred beams about 2-1/2" in diameter, these ran East and West and no doubt rested upon a cross beam that was supported by the depression in the South wall and the North part of the curved wall.

1' 6" from the South wall there had been a doorway but only the sill and part of the South side remain to show its form. The plaster on the side is thick and rounded and the base is composed of a large flat stone that has a rounded end; on this had been placed another stone that was covered with plaster to form a surface for the sill. The sill is a flat piece of sandstone with notched ends for the insertion of the upright side posts. The North side of this doorway abutted the end of the circular wall of the next bin.

The wall on the Northern part of this bin is very thin and, judging from its formation, only extended a short distance above the present level, which is 1' 7" above the floor. No corn or other serial was found in this bin to point to its having been used as a receptacle for produce, nor was there anything to give a clue to its use. The circular wall ranged from 5" to 8" in thickness and was well plastered.

The bin just North of this one was of the same form with the exception of the South wall which is formed by the convex part of the North wall of the other bin, using the Southeast corner as a centre of a circle, the rounding wall would be the arc of a circle, the radius of which was 3' 1".

The East wall is formed by the main room wall and is well plastered, there are three depressions for the reception of beams, two of which are on a level with the top of the North wall of the bin, the third is about 1-1/4' below them.

The circular wall is solid and well built, having for its in-

-ner base support three large metates, or slabs, that stand on end and slant a trifle toward the North, these are on the North side and the edges almost West, then there is still another large slab, in a similar position, on the West part of this bin; there is a well built wall between the slab at the Northwest part of the bin and the one against the South wall, and just above it there are evidences that point to a doorway having been at this point.

The plaster at the top of the North wall is very thick and is rounded, and, at this part is on a level with the beam supports in the East wall. The North wall is from 1/2' to 3/4' thick at the top but is much thicker at the bottom.

There is a post below the point in the west wall where the old door probably stood, it is broken now but evidently served as a step although it might have been a support.

The Western part of the circular wall is nearly 2' thick and has served as a support for the cross beams from the East wall. About 1' 3" above the support holes in the East wall, there is a line on the plaster that defines the roof limit of the two bins, it extends from a point where the circular wall of the North bin joins the East wall to the South wall, and its lower limits are on a level with the upper part of the highest support hole in the South wall, also with the charred beams in the circular part of the South bin. The lower series of holes in the East wall are the same height in both bins and perhaps formed a second floor or shelf for stowing goods.

These bins had evidently been built after the room had passed into disuse and become partly filled with rubbish, for the walls are simply a facing against the debris, and it was therefore, essential to have a firm surface to hold back the loose material; hence the stone slabs and metates on edge in the lower part of the circular wall of the North bin.

A little over 2' above the floor level at the Northwest part of the North bin the plaster is cupped, showing the point where it was rounded out over the debris; below this place there is nothing to be seen but the rubbish, such as covered the whole floor of the room.

There are two steps composed of large flat stones, that lead to the doorway in the South bin, these rest upon the debris as does also the large metate with a hole in the bottom, that lies against the South wall of the room, and near the West wall of the South bin.

Bins in West End.

In the West end of Room #85 there is a series of bins that stand above the floor level of the main room. There are three double tier bins against the West wall of the room and one large one East of this series. The one in the Southwest corner of the upper series is a small pocket like place, having the plaster of the sides rounded at the base, thereby, forming a cupped bottom; in the South wall of this bin there is an opening 9" in diameter and about 8-1/2" from the West wall, it is where the ceiling beam had passed through. This beam must have been a long one, for there is a hole on the same level, in the South wall of Room #83, and also a hole of the same size, in the North wall of the bin and directly in line with the other two, the plaster and stones have fallen where it would have entered the North wall of the room (#85), so it is impossible to say whether it crossed the entire width of both rooms.

The West and North sides of this bin were unbroken but presented an irregular surface, although well plastered. They are all blackened and had suffered considerably from the fire that ruined this part of the room.

The entrance to this bin is on the East side, and there had been at one time, a good doorway as evidenced by the South side which is

fairly well preserved. Outside of the original East wall of the bin and against the South wall of the main room, there is a piece of masonry that is 6" thick against the South wall but tapers down to nothing at the edge of the doorway, and it had probably been placed there some time after the inner wall was built, for this wall, the under one, was blackened by smoke, on the North side of the doorway the order was reversed, the thick part being near the doorway and tapering toward the North.

The floor of the bin is plastered and is supported on beams 3" in diameter, two of which extend into the main room. The walls of this bin are still standing to within a few inches of the ceiling level.

The two bins to the North of this one and on the same wall line and level, are broken to such an extent that nothing can be gathered as to their original appearance. The walls are of large rough stones and at the South end of the one next to the Southwest corner there is a large sandstone boulder that runs East and West, one end extends under the west wall of the room and the other forms the Northwest corner of the large bin.

The large bin just East of and adjoining the wall series is a spacious affair that extends from the floor level of the room to the ceiling, at least at its West and Northern parts. About 4' 9" above the floor level there are remains of ceiling beams in the North wall of the bin, and these poles, judging from the angle must have run to the South wall of the bin. The East wall however, is rounded at this height and therefore, could not have extended above this level, again, there is a hole in the South end of the west wall from which a beam may have extended Eastward, so there may have been a cover over the entire bin, but beyond that all is speculation, as there is no mark on the west wall whereby one may define the limits of the upper bin.

The West wall of this bin is rough and irregular, in the North-west corner there is a large sandstone boulder, or more properly speaking two, for there is a broad seam in the top that seems to divide it. There is a wall in this corner that stands 1' 6" in height and has a beam 3" in diameter across its top, then the bare stone is in evidence for 2' 6" and the wall begins again; this upper part of the wall is supported by poles that rest against the rock.

South of the second stone, which is a part of the West wall proper, there is a plain stretch of masonry for about 8" and then a doorway is encountered that should open into the lower part of the bin in the Southwest corner of the room; it has been filled and then plastered over, which has almost obliterated it, the only evidence of its having been a doorway being the depression in the plaster and the stone sill that projects 2" beyond the wall. The balance of this wall is plastered and in good condition but the surface is irregular. The beam hole before mentioned, may have been where a floor beam from one of the West bins protruded, but from the angle of entrance it would seem hardly probable. This wall stands to within a few inches of the ceiling timbers.

The South wall of the bin is in a fair state of preservation and retains all of the plaster with which its surface was covered. There is a little seat or step in the Southwest corner, it is 1' 2" above the floor and extends along the South wall a distance of 1' and along the west for 8", it is 7" wide from the corner to the centre of the edge; it is seemingly composed of plain plaster and may have been used for a number of purposes.

There is a doorway in the central part of this wall, South, its sides are well plastered and rounded, and it has a flat stone for the sill, it extends from a point 2' 7" above the floor level to the top of the standing wall which is on a level with the ceiling beams

in the North wall of the bin,

The East wall is plain and has suffered by fire, its top being a brick red. The plaster has fallen to a height of about 2' above the floor level, but over the balance of the surface it is intact. As mentioned before, this wall extends only to the level of the ceiling beams in the North wall and had been rounded at this point, the same as the North wall of the North bin against the East wall of this room.

The surface of this wall is unbroken on its upper part save by the cracks that seam its surface.

The North wall is rough, bulged and burnt but the extreme heat had extended but a few inches below the ceiling beams. There had been five or six beams that entered this wall and above their level the plaster is burned to a terra cotta color. This upper wall had extended to the ceiling and made a turn at the Northeast corner, but how far it extended over the East wall could not be ascertained.

The floor was smooth and hard and below it, about 2" there was an adobe floor that was so hard that it must have been baked, it was nearly 2" thick and one could hardly make an impression in it with a trowel. Embedded in the upper floor, first, was a dressed stone, it was directly under the doorway in the South wall; it had evidently served as a step but the debris in falling had pressed it against the South wall.

Main Part of Room #85. Room #85 was a long spacious place that occupies a position just North of Room #83, East of Room #84 and #13 and West of Room #78. A small portion of it was worked in 1896 and it was then given as Room #14. In renumbering at the commencement of the work of this year it was taken for granted that there were two rooms between Room #13 and Room #78, hence the East part was numbered

Room #85, thus it is that the room has two numbers. This room has suffered greatly through the agency of fire and the heat was so intense that sand and plaster were vitrified and glazed, the North wall suffered more than the others, and the upper part of the room more than the lower. To cause such a furnace there must have been corn stalks or grain stored in the room, but no evidence of such a cause could be found.

The North wall above the ceiling beam level is burned, warped and generally destroyed. There is a doorway of the rectangular type in its Western part, it has a stone slab at the top and sill and the sides are rounded and plastered. It is the same style as the one in the North wall of Room #99, having the sloping space at the sides for the stone door to rest against. The plaster about this doorway is still in place, but is black, white and red from the action of the fire.

About 3' East of this doorway there is what seems to be an old doorway that has been closed with plaster and stones, but the wall is in such a condition that it is impossible to tell. The wall East of this place has fallen Northward but is still held in place by the debris in the next room. Holes in this wall show where two large ceiling beams have entered, they are fully 1' in diameter and there are corresponding holes in the South wall. There is a large square doorway in the Northeast corner just below the ceiling level, it has boards for the lintel, and strange to say, the fire did not devour them, but it seems that the fire limit extends only to a point 6' West of the East wall, the plaster in the area east of this line being only slightly blackened, probably by the smoke. West of this line the heat must have been terrific, judging by the condition of the wall.

From a point on a line with the East wall of the large bin, to the West wall, this wall is in a fallen condition and we dared not remove the stones and debris for fear that the wall might topple over.

The South wall is of two thicknesses, the wall above the ceiling level being fully 6" wider at the West end than the lower wall, the projection decreases in width as it advances toward the East until it is barely 3" where it passes the East wall. This wall abuts the west one and is still quite solid, although the massive top wall looms over one in a top heavy manner that is anything but pleasing to one at work in the room below.

There are two closed doorways in the upper wall, the one near the West end is the smaller one and has the sides more rounded than the other, but both are of the rectangular type and have their sides well plastered. Both are filled with carefully laid stones and the surface has been covered with plaster.

The lower wall is solid and in good condition, it was only slightly damaged by the fire and retains all of its plaster. There is a doorway in the central part of the rectangular type, the sides have been well plastered, and five poles formed the lintel, two of them are still in place.

About 1' above the East side of this doorway there is a depression for the reception of a beam, it is 3" in diameter and has a mass of plaster around its upper and West side, into this pieces of sandstone have been forced to chink the end of the beam. Between this and the Western wall of the Eastern bin there are three other depressions in the plaster that have probably served the same purpose, of the two ceiling beam holes mentioned, one is just West of and really rested against the West wall of the East bin, and the other was about 7' 6" West of it.

The bin in the East and West part of the room took up quite a portion of this wall, and descriptions of its surface, as included in these confines, will be found in the descriptions of the bins.

The East wall abuts the North and South and presents an un-

-broken surface save where the beams over the bins entered the wall. The ceiling level is well defined by the ceiling beams, or poles, over thirty of which are visible. The plaster on this wall is blackened somewhat by smoke but is intact and in good condition.

The wall above the ceiling beam level has a heavy coat of ordinary plaster, and over it there has been placed a layer of white. This wall, the upper one, stands to a height of about 3'.

The West wall, or at least what may be seen of it above the bins, presents a very delapidated appearance. About 1' from the South wall there is a closed doorway that has had rounding sides, it is covered with plaster but its ovoid form can be defined. North of it the wall has fallen to such an extent that no special features can be recognized.

After removing the stone steps, mentioned in the description of the east bin, a small bin was uncovered, its Northeast part was formed by the metate that was mentioned as being in the Southwest corner of the North bin. The clearing of this bin proved that the slab was a metate, as the marked side was in evidence in the small bin. The Southeast part of this bin was formed by the Northwest wall of the South bin and the balance was simply the walls formed by the sand and one of the stone steps. From the appearance of it, it would seem that it was either never finished, or else used only for a short time and the place was filled in and the stone steps put in place.

There is a large post in the South part of this bin that stands almost under the doorway leading into the South bin, it is about 10" in diameter and stands about 2' 9" above the old floor level. The top is burned and in making the bin it was covered and served as a support for the masonry.

1' 11" West of this post there is another, it is about 6" in diameter and stands 1' 6" above the old floor level. 5' 5" West of this

one is another, it is about the same size as the last one, but stands 4' 2" above the floor. Whatever the use of these posts, which are in a line with the one in the Northeast part of the South bin, on the East side of the room, they evidently formed a part of the room ere the visitation of the fire. All but the one in the bin are burned, and their tops are now a mass of charcoal.

There is a post 6" in diameter that supports the stone sill in the South wall of the large bin in the West part of the room, and another 4" in diameter serving the same capacity under the sill of the doorway into the lower bin in the Southwest corner. This doorway was heavily plastered and the sides were rounded, two flat stones formed the sill but the top had fallen in, as was the case with the doorway in the large bin. The sill of this doorway, Southwest, projected 6" from the bin wall and this space had been filled, from the floor up, with solid mortar. All of the posts that were examined below the floor level were packed with the dark colored slabs, the same as was found in the large Estufa in the West court, and around the logs in the supports dug out by Waylo, in Estufa Room #16. These were packed around to a height of from 6" to 10", and from its firmness, was evidently tamped there as a fire-place; and just West of the bin on the East end of the room, in fact part of it is under the largest of the stone steps, it is over 1' deep and is below the old floor level. There is a large stone slab standing on edge in the Northeast part of the fire-place, and its edge must have reached just to the floor level. Another slab on the Southeast side, reached from the last mentioned stone to within 4" of the second post West of the bins. This post, it seems, was put in place after the fire-place had been in use, as one of the stones is missing on this side and the coal, stones and mortar used as packing extend fully 1' over the floor of the fire-place. 9" Northwest of this post stands the third stone, all of these are calcined and blackened, as is also the

stone bottom. The stones on the North side were broken and fell to pieces when the earth was removed.

6" West of this fire-place is a second one which was probably built after the post spoiled the utility of the first one. This one is 1' 8" deep and is composed of five large slabs of sandstone, one stands on edge at the East, one at the Northeast, one at the Northwest, one at the west and the fifth at the South. The bottom is composed of a large stone slab. The stones were blackened and calcined, and were therefore, exceedingly friable and delicate.

The new or upper floor level was over 1' above the sill of the doorway in the South wall, and upon this rested the large double metate with a hole in the centre.

The measurements of the thickness of the various walls is as follows; North South , Top 1' 7", bottom 1' 4", East 1' 4", west For a better idea of this room see 6-1/2 x 8-1/2 photos, also 4 x 5 prints for details.

Room #89 is one of the series of rooms running East and West of which Room #99 is the Eastern limit. It is bounded on the North by an unnumbered room, on the south by Room #90, on the East by Room #98 and on the west by Room #88.

The North wall is built of various sized stones, no reference to continuity of size of material or manner of laying being shown. The lower part is in good condition and still retains the greater part of its plaster, but the upper part is warped and in places stones have fallen out. At one place, near the ceiling beams and only a few feet from the West wall, a few stones have fallen, disclosing a timber built into the wall, it is laid horizontally and was evidently used as a strengthening medium. It is just above one of the square holes and no doubt served as lintel to the ventilator, which, however, seems to have

been closed with stones. There is another of these square places near the East wall, thereby, following out the same order as in Rooms #87-88.

There is a doorway in the lower part of this hall, it is of the rectangular type and has eight poles for the lintel, these average 2" in thickness. At the Northern limit of this doorway there are two poles that are 1-1/2" below the main lintel, the space between them being filled with stones. The doorway was half full of debris, the lower part however, was closed with a well laid wall and was plastered over. From the holes in the wall at the ceiling level there must have been eight large beams running North and South.

The second story wall is of the same style of masonry as the lower story, but was evidently built after the lower wall, for it is fully 3" North of the lower wall surface. This may have been caused by the upper wall being built over the roof of the lower room, and thereby, making a perfect joint impossible. This story is in good condition and has a doorway in the centre. It is rectangular in form and has the peculiar jog on either side, near the North end. The top of this doorway has fallen. At the East end of the room the third story is in evidence, a pile of wall about 8' long and 6' high being still in position. From the floor to the second story ceiling beams is a distance of 19', thereby, making over 22' of wall on the West side of this room. For a better idea of this wall see 4 x 5 print.

The South wall is bulged and buckled to such an extent that it is almost a wreck at the West end. It is similar to the North wall in its masonry, and retains a great portion of the plaster, most of which however, patches.

The only intentional break in the surface is a doorway, of the old wide top type, near the East end, the lower part is closed with large stones and the upper part is filled with debris. The outlines

are fairly plain but the height could not be ascertained owing to the falling of the wall, which carried part of it away.

The East wall is solid and presents an unbroken surface, the masonry being the same as in the other walls. Over fifteen poles can be counted at the ceiling level, and above them the wall of the second story rises to the height of the beam holes in the North wall. The surface has no opening in it, and although warped laterally at its centre, is still in fair condition. This wall abuts the North and South walls.

The west wall stands almost to the first ceiling level and abuts the North and South walls, it has quite a patch of plaster on the lower part and the masonry does not form that of the other walls. There is not a break in its surface, all of the stones being intact.

The floor of this room was rather uneven and no fire-places were found in it. The measurements of the walls gave the following thicknesses: North 1' 9", South 1' 10", East 1' 10", West 1' 11".

Room #98 is next to the East one of the series that stretches East and West in the North part of the ruin, and of which Room #86 is the most Western one worked. It is bounded on the North by an unworked room, on the South by Room #20, on the East by Room #99 and on the West by Room #89.

The North wall of this room is in a fair state of preservation, the masonry of the lower level being of the assorted stone variety and seemingly used regardless of size or appearance in the wall.

There is a doorway of the rectangular type in the lower central part that has had what seems to have been a board lintel, only a layer of wood dust remains to judge by, so it may have been poles. It is filled with stones and debris, and the lower part was plastered.

There are two ventilators in this wall situated about 1' below the ceiling beams, and near either end wall. The one near the East wall

has been filled with stones and the lintel poles may still be seen.

The second story is about the same as the one in Room #89, There is a doorway in the centre, rectangular in form, and has three lintel poles in place at its Northern limit. There are two poles in place below the lintel, and these form the top of a secondary opening formed by building a narrow wall against either side of the original doorway, these formed a rest for the stone door. In building this second story the joint was made so that there is only a trifling difference between the surface of the two walls, but not so with the third story wall, part of which is still standing, including a doorway side. The face of this top wall is fully 4" North of the second story wall. This top wall is standing a little higher than its neighboring part, over the next room, Room #89; for a good idea of the appearance of this wall see the 4 x 5 prints.

The South wall is more compactly built than the North one and has more faced stones in its surface, it is in very good condition save over the doorway in the centre, and still retains the plaster on the lower part.

There are two doorways, both in the eastern part, and only a little over 1' apart. The one near the East wall is very small and of the "T" type, the lower part was a little over 2' high and only 1' 3" wide, while the bar part was only 2' 8" wide by 11" in height. The lower part is filled with a well laid wall, while the upper part is full of debris.

The doorway just west of this one is of the rounded rectangular type, it is in the centre of a square of masonry, about 3' 10" x 4'. This place it seems had been left when the wall was built, there is a pole running along its top that may have served as a lintel pole, but at all events this space has been filled in with a solid wall and only a small doorway left, under which are two steps. The wall above this

square place has fallen, but at the North and West ends it stands from 1' to 4' above the ceiling level.

The East wall is standing to the height of the second story ceiling level, the masonry is the same as in the other walls and the lower part is still plastered.

There is a closed doorway near the floor and about the centre of the wall, it is rectangular in form and is filled with large stones and covered with plaster. At the first ceiling level the ends of the poles may be seen in the wall above these poles. The wall is weathered and most of the chinking has fallen from between the stones. This wall abuts the North and South ones.

The West wall presents an unbroken surface from floor level to top, save where the poles have rested at the ceiling level. The masonry is about the same as in the other walls, although in the lower part there has been more of an attempt to alternate layers of large and small stones. This wall abuts the North and South ones and stands almost to the height of the second story ceiling level.

The floor of this room is rough and uneven and no fireplaces were noted. The floor was calcined in a great many places, and these may mark the old cooking places.

The steps under the doorway in the South wall are worthy of special mention, as they are about the finest and best preserved that have been found in the ruin. There was a similar step in the opposite side of the wall in Room #20. The step in this room is built of stones and entirely covered with plaster. There are two steps in the block, the first or lower one of which is 1' high and 8" deep and 2' 1" wide over all; the second one is 1' 1" high, 11" deep and 2' wide, making the whole step a little over 2' high. Two stones project from the wall that seems to have been a part of it, which would have made it 2" higher.

The measurements of the thicknesses of the four walls gave

the following results: North 1' 6" 2', South 1' 10", East 1' 10", West 1' 10".

Room #110 is situated just North of Room #57, on its Eastern side lie Rooms #58 and #63, on its North is Room #111 and on the West Room #108. This room is one of the highest perfect rooms in the Pueblo, it is part of the old building and below it are two open rooms. These were described in 1896 in the series of underground rooms. The one directly beneath Room #110 is the one through which we gained entrance to the series; this was through a hole broken in the wall and not a regular doorway, the manner of reaching the lower room being through a hole in the Northwest corner.

Room #110 is a bin like affair, the only thing that relieved the sameness of the plastered walls being a doorway in the East wall and the end of a large beam in the south wall.

The North wall presents a plain plastered surface, it abuts the East and west walls and is composed of various sizes of irregular shaped laminae of sandstone.

The south wall has a well plastered surface and it is unbroken save at a point 1' 1-3/4" from the floor, and 10" from the East wall line, a beam 10-1/2" in diameter is to be seen, its smooth end being flush with the wall surface. This wall is built of irregular shaped stones and abuts the West wall.

The East wall is well plastered and has a doorway near the central part, it is of the rectangular form and has a stone slab for the sill, only part of it remains as the wall has fallen, carrying part of the top away.

2' 10" from the South wall and 4' 6" from the floor, there is a beam rest in the wall, it is about 3" in diameter and about the same in depth. There is a corresponding place in the west wall, this

is also built of large flat irregular stones and abuts the South wall.

The west wall has, in keeping with the others, a heavy layer of plaster on its surface, this gave the room a finished appearance, and besides hiding the rough stones served to strengthen the wall. There are no openings in its surface, but 8" North of the South wall and 4' 6-1/2" from the floor, there is a sort of a pocket; it is an irregular affair and measures 7" in width by 5" in height, and extends into the wall about 6", the top is arched and very little care was shown in making it. The beam support mentioned as being in this wall is 2' 11" from the South wall and 4' 7" from the floor. The plaster has fallen from about its edges but its dimensions are about the same as the one opposite. The walls of this room average 5' 6" in height all of them being below the ceiling level, as no evidences of that point are to be seen. The floor is well plastered and in good condition and the thickness of the walls is as follows: North 1' 5", South 1' 0", East 1' 6", West 1' 3".

There is a wall that forms part of the east wall of Room #97 (92) and runs parallel with the West wall of Room #110, and rests against it, making a thickness of 3' 0".

Room #111 lies just North of Room #110, South of Room #104, East of Room #108 and west of Room #63. The lower part of this room was broken into through the South wall in 1896, and it thereby added another to the list of underground rooms, it is described under the name of "The Angle Room" if I remember rightly. A part of the upper room was exposed and during the winter of 1897-98 Al Wetherill, Thomasita, a Navajo, and O. H. Buck, dug out the debris that rested upon the floor, and then, after removing the floor beams, continued their work beneath the floor level of the lower room. It was in this place that the large corrugated olla, purchased from Mr. Buck, was found. This room is part

of the old series, the walls being composed of irregular shaped stones and the surface heavily plastered, as in Room #110. There are no openings in the upper walls, and where they have been exposed to the elements a goodly portion of the edges of the stones are showing, the plaster having washed out. No ceiling beams were used but the poles ran East and west. In the description given in 1896 a mention was probably made of beams that ran North and South under the ceiling poles, and parallel with and near the East and West walls, these were supported on posts and served in lieu of beams, such as are usually set into the walls.

The lower room is well plastered and there is a doorway of the rectangular type in the West side but otherwise, the walls present unbroken surfaces.

The doorway in the West wall is of the rectangular type and has poles for a lintel. About 4" below the poles there is a board and the space between is filled with thin slabs and plaster. The sides have been covered with a heavy layer of plaster that was rounded at the top.

The lower part of the north wall slants northward fully 8" from the perpendicular but the top wall is comparatively straight. The South wall abuts the East and west walls, the west wall abuts the North as does also the East. The inner surface of the East wall if carried out would be almost on a line with the outer surface of the East wall of Room #104, but the East (#111) wall is rounded where it joins the North one.

The thickness of the walls is as follows: North 9" at top but wider at the lower part, South 1' 5", East 1' 9" and West 1' 6".

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FIELD NOTES
of
F. R. SWANTON.
1898.

Room #93, floor 7' 8" below upper floor level. Two or three large pieces of matting and a great many small white beads found upon this floor. A small whetstone was found among the rubbish which had fallen from above.

Room #94. Grindstone with three furrows, 1' 3" below upper floor level, 4' 5" from Northeast corner, side of East wall. Divided into two portions near the bottom by a low partition. In the Northern of the two apartments we came upon sand 5' 9" below upper floor level. In the Southern apartment we came upon sand 7' 8" below upper floor level. In the Northern apartment there was a stratum of charcoal, etc. 10' 6" below U.F.L.

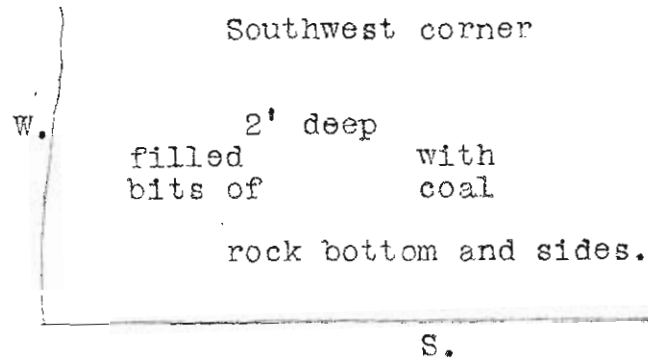
Room #95. The butt end of an arrow shaft was found among the rubbish in the upper part of this room.

Room #96. Aznrite, a fragment of turquoise bead, pieces of pottery and bones found in this room. This too was divided near the bottom by a low transverse wall.

Room East of #91. Large block of stone lay close to West wall, about 1/2' above the upper floor level, midway between side walls. Dimensions 2' 1" x 1' 9" x 4".

Room #78
Southwest corner
2' deep
filled with bits of coal
rock bottom -1- and sides.

Room #78.



Hearth (several large stones) dimensions 2' x 1' 9". Largest axis about parallel to West wall. 12' 1" to Northwest corner, 13' 11" to Southwest corner, 9' 11" below U.F.L. A small stratum of charcoal only found upon this hearth.

Room #83. Distance between (from top) first and second floor levels 1' 9", second and third floor levels 2", first floor level to U.F.L. 6'. Hearth East wall, 2' 8" x 2' 4", the longest axis parallel to the East wall. Location 5' to Northeast corner, 6' to Southeast corner, runs under east wall. Fire-place Southwest corner.

The lower floor level paved with a great many stones about at the centre. The East wall hearth seems to have belonged to the lowest floor level.

Location of posts found on uncovering the lower floor level.

X a stone placed perpendicularly, its top on a level with the third floor. Distance from U.F.L. to bottom of posts 8' 10". Rocks piled under posts for 1' under it and around the lower portions. Layer of large rough stones, apparently in their natural position, 12' 5" below U.F.L.

Small stone compartment near fire-place in Southwest corner, dimensions 2' 8" x 1' 10", in height about 6".

Stones on three sides open to East and above, no stones on bottom.

Distance, open space, between stones 1' 2" each way. Two large flat stones found just back of this against the West wall, but a little to the North of the corner. Location to centre 2' 10" from Southwest corner, 11' 2" from Northwest corner, depth to bottom of stones 7' 6" from U.F.L. Post close to north wall 4' 11" from Northwest corner, similar to the three posts already located. Hearth (probably) in

Northwest corner, made of two large flat stones, 1' 6" x 1' 6", on same level with lowest floor level. VI. depth 1' diameter, 1' Northeast corner of room. Nearly filled with bits of coal embedded in which were fragments of a wooden post (?)

I. 7' 5" to Southwest corner, 7' to Northwest corner, diameter 1' 8", depth 8" or 9", rock bottom.

II. 6' 10" to Southwest corner, 9' 3" to Northwest corner, 2' 5" diameter, depth 8" or 9", rock bottom.

III. 11' 6" to Southwest corner, 11' 2" to Northwest corner.
depth 1', rock bottom

(probably not significant.)

IV. 10' 11" to Southwest corner, 8' 5" to Northwest corner
8' 5" to Northwest corner, 2' diameter.

V. 8' 4" from Southeast corner, back stone resting against South wall.

Room #86. Rude mortar C-R-86
5' 11" below second F.L., 3' 8" from Northeast corner, side of North wall.

Two large shells A-R-86
6' 5" below S.F.L., 7' from Southeast corner, 1' 10" from Northeast corner. Associated with fragments of a turtle shell rattle.

Bowl. B-R-86

(Measurements same as those for C-R-86)

Polishing Stone.

D- R - 86.

(Measurements same as for C- R- 86)

Slab of Stone

E- R- 86

(Measurements same as for C- R- 86)

Small shell pendant

F- R- 86

9' 3" below U.F.L., 2' 9" from Southwest corner, side of West wall.

Sticks wound with cord. Found in Northeast angle of room about 13' below U.F.L. (too charred to be preserved).

Distance between two floor levels 7' 2".

Small turquoise pendant found in loose earth thrown from around A- R- 86.

Fragments of a tortoise shell rattle. G- R- 86.

Found with sea shells (A-R-86) and has same measurements.

(other parts of this found about 1' 6" below.

Pitted stone slab.

H- R- 86.

7' 2" below S.F.L., 6' 8" from Southeast corner, 7' 6" from Northeast corner.

Stone hammer.

J- R- 86.

7' 6" below S.F.L., 7' from Southeast corner, 7' 4" from Southwest corner, near south wall.

Pitted stone slab.

K- R- 86.

9' below S.F.L., 2' 10" from Southwest corner, close to South wall piece of the same. K- R- 86.

Notched hammer.

L- R- 86

8' 2" below S.F.L., 2' 3" from Northeast corner, 9" out from North wall.

Charred basket work.

M- R- 86

8' 10" below S.F.L., 10' 1" to southwest corner, 11' 10" to Northwest corner. Mixed with charred sticks and a few charred corn cobs.

Flint Point.

N- R- 86

7' 11" below S.F.L., 5' 6" from Northeast corner, 8' 1" out from wall.

Parts of second Tortoise shell.

O- R- 86.

8' 10" below S.F.L., 6' 5" from Northeast corner, 9' 6" from Southeast corner, mingled with charcoal, charred corn cobs, etc.

On about the same level as these latter finds were four or five arrow points found in different places, usually amid the burned clay which lay over the charcoal and charred timbers.

A small vessel complete, though broken, and two large pieces of two others.

9' 6" below S.F.L., 3' 6" from Northwest corner, side of North wall the complete pot lay nearest to the wall. These were just on top of a layer of charcoal above the third floor level.

A small stone hammer found in earth thrown out from about this level.

:sack

R- R- 86.

9' 3" below S.F.L., centre 2' 3" from Southeast corner, 6' 5" from Northeast corner, diameter as nearly as could be determined, 1' 10", layed, in short, in Southeast corner. A few sticks wound with string found near it (fragments).

Small bit of drilled wood found in lowest charcoal layer just over floor, and in the centre of the room (about) same depth as S- R- 86.

Broken bowl covered with a notched slab. T- R- 86.

9' below S.F.L. to top of stone, 2' 8" from Northeast corner, 7' 5" from Southeast corner. Nothing found in bowl except charcoal and rat manure.

Bone Awl.

U- R- 86.

8'6" from Northeast corner, 10' 4" from Southeast corner,
in layer of charcoal, etc., just over floor.

Ceremonial Stick/

V- R- 86.

On level of room floor 3rd F.L. in Southeast corner.

Depth of floor level 9' 9" below S.F.L.

Good metate'

W- R- 86.

8' from Northeast corner, 9' 7" from Southeast corner,
turned upside down to form part of floor.

Stone Axe or Hammer.

X- R- 86.

8' from Northeast corner, 7' 8" from Southeast corner, 1'
8" from floor level, 5" below coal stratum.

Almost directly under the South window, 7" from the Southeast corner, was a metate placed on end close against wall. It was built into flooring and protruded 6" above it. This was almost certainly a step to enable the occupants to reach the single small door which was placed high in the wall.

Floor construction Room #36.

Room #92. Drill (stone). On level of room floor 7' 6" from Northeast corner, 8' 8" from Southeast corner.

Hearth (made of large stones) close to middle of East wall, 7' 6" below U.F.L.

to { 2' 10" from Northeast corner
centre of {
hearth { 3' 2" from Southeast corner

A little charcoal and some ashes on central stone of hearth.

Large round stone (hammer?) 5' 11" below U.F.L., 3' 5" from Northwest corner, side of West wall.

Square, flat piece of wood, rounded on the edges. About floor level, 1' 6" from Northwest corner close to West wall.

Bear claws, front, 4" lower than hind feet, 8' 2" from Northwest corner, 5' from Southwest corner, they lay on the South end of the great West fire-place. Hind, 8' 2" below U.F.L. close to second floor level, 4' from Southwest corner close to West wall. Large and small (small?) fire-places.

On the large fire-place were found a bit of blue feather, a bit of red feather, several large gray feathers, squash seeds, beans, kernels of corn, pieces of full size squash, and corn husks, also at a little higher level the front claws of a bear.

On the small fire-place (?) or pocket were two small bits of gray feathers and fine charcoal.

Room #97. (under #92) A large flat stone, perhaps hearth-stone (not preserved) A- R- 97.

Found in Southeast corner but not in its original position. It seems to have fallen from room above.

Two small wall pockets worked into the plastering. Hor. depth of pocket about 2" (1) close to ceiling, in Southeast corner, (2) nearly at top of small wood and plaster partition at East end of room. Excavated on North side of partition.

Two stones with burned material upon them. B- & C- R- 97.

from alcove in Northeast corner, just above D- R- 96.

Bear claws. D- R- 97.

4' 5" below U.F.L., 3' 10" from Northeast corner, 3' 7" from Southeast corner of recess between plaster wall, and end wall.

Bear claws. E- R- 97.

5' 8" below 2nd F.L., 5' from Northeast corner, 1' 4" from end of wattle wall.

Bear claws. F- R- 97.

5' below 2nd F. L., 1' 9" from Northeast corner, side of North wall.

Bear claws.

G- R- 97.

5' 11" below U.F.L., 3' 6" to end of North wall, 6' 3" to Northeast corner of room.

Bear claws.

H- R- 97.

5' 6" below 2nd F.L., 3' 2" to end of wattle wall, 5' 2" to Northeast corner.

Bear claws.

J- R- 97.

6' below 2nd F.L., 6' 3" from Northeast corner, side of North wall.

Bear claws.

K- R- 97.

6' 1" below 2nd F.L., 7' 3" to Northeast corner, 5" out from wall 1 points of claws to East.

Bear claws.

L- R- 97.

6' 1" below 2nd F.L., 4' to outer end of wattle wall, 7' 9" to Northeast corner, points of claws to Northeast.

Pieces of pottery.

M-,R- 97.

6' 5" below 2nd F.L., 6' 5" from northwest corner, 7' 6" from Southwest corner.

Half of a large shell.

N- R- 97.

7' 3" from Southwest corner, 3' 8" from Northwest corner, 6' 7" below S.F.L.

Depth of centre mat 5' 10" below S.F.L., Depth of corner mat 4' 6", corner mat nearly filled the space indicated. Depth of fireplace about the same as that of the centre mat. The corner mat lay on a plane dipping West and upon a of small stones.

Room #87.

Large flat stone in Northeast corner, one side close to North wall.

Thickness of stone 1-1/2".

Room under #87. To build the walls for #87 the black soil accumulated on the floor of the old room seems to have been levelled off, from this accumulation and the rat leavings in it, this older room had probably been abandoned for some time. On this black soil a wide foundation wall was laid, broadened at the base for greater security in the soft soil and led up to a level with the top of the old walls. Between the old walls and the new foundation walls the space was filled up first with large pieces of clay mingled with rocks, then with 4' or 5' of yellow sand.

Room #90. Large Pieces of pottery. A- R- 90

4' 6" from Southeast corner, close to East wall under window.

many hammer stones found close together, 3' 2" from Southwest corner close to West wall just above floor level.

Perfect cast of a basket, found sitting on floor 10' 2" from Southwest corner, 9' 6" from Northwest corner.

Room #83(continued) All under lowest floor level. Semi-circular structure built of stones and filled with coal, depth 1' 7".

Open side

other dimensions

away from the corner.

1' x 1' 3".

Location, Southwest corner 2' from Southwest corner, 10' 6" from Northwest corner, depth 1' 5" below third floor level to top of "structure".

Two pebbles, a white and a black found 4' 6" apart, both lying on elevation running round old estufa, white to east, black to West. (see opp. page)

Whistle shaped object, 2-1/" long, 4' 7" below lowest floor level, 6' 11" from Southwest corner, 6' 5" from Northwest corner. Lay on elevation running round old estufa a few inches west of black pebble.

C- R- 83.

Sandstone Nodule.

D- R- 83.

6' 2" from Southwest corner, 11" from C- R- 83, same depth as C- R- 83.

Location of pebbles, black 6' 5" from Southwest corner, 11"
from C- R- 83. A- R- 83.

same level as C- R- 83.

White

B- R- 83

8' 5" from Southwest corner, 4' 6" from A- R- 83.

just back of the estufa step around the perpendicular wall
on the inside, was a strip of rotten wood or bark.

Room #105. Two or three pots in fragments. A- R- 105.

9' 7" below U.F.L., 3' from Southwest corner, side of West
wall. In fallen debris fragments of another.

B- R- 106.

9' 7" below U.F.L., 3' 7" from Southwest corner, 9" out
from South wall. In fallen debris.

Whole vessel

C- R- 105.

1' 11" from nearer of two angles at Northeast corner, side
of East wall, 7' 5" below U.F.L.

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