

The

Southwestern Monuments

Monthly Report

for

January, 1934.

Contents

Arches-----	34-39	Introduction----	1
Attwell, Salt.----	49-51	El Morro-----	17-20
Aztec Ruins-----	7-9	Gran Quivira-----	31
Aztec Archeology--	10-14	Montezuma-----	2
Bandelier-----	20-30	Montezuma Arch.---	3-6
Canyon de Chelly--	32.	Mojave-----	3
Capulin-----	25	Pine Springs-----	40
Casa Grande-----	43-47	Raynolds-----	41-42
Casa G. Archeology--	47-8	White Sands-----	21-24
Chaco Canyon-----	15-16	Wapiti-----	33-34
		W. River Canyon----	35
		Conclusion-----	52.
		Petrified Forest----	53-55

THE SUPPLEMENT.

More About Tumblers-----	A
Repetition and Duplication---	B
John Catherill's Report-----	D
Irwin Hayden's Letter-----	E
Wedding Bells-----	F

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UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF NATIONAL PARKS
BUILDINGS AND RESERVATIONS
SOUTHWESTERN MONUMENTS

Coolidge Arizona, February 1,

The Director,
Office of National Parks,
Buildings and Reservations,
Washington, D. C.

Dear Mr. Director:

January, with its hectic rush and exasperating episodes, lays behind us. It only remains for us to tell you through this report how much and how little we have accomplished.

The High lights of the month were, of course, the various Civil Works projects which we have going among the southwestern monuments. In general good progress was made, although the shut-down order which reached us by wire on the 18th has caused better than a fifty percent loss of efficiency in our work. The unnecessary uncertainty under which we have had to work since that time has been maddening; we were originally given certain set-ups for men and materials; we were keeping within our funds and were running along ship-shape, seeing our way through in spite of the hundreds of extra complications thrown on us by the peculiar manner in which we were tied into the State organizations; when the blow-off came, and since then we have not known four days ahead how much money we could spend for materials, teams, truck hire, etc. It has been a great game trying to operate 14 different projects over two states under such conditions. One of those old fellows who rode in the Roman standing races would seem like a long lost friend to us who have been trying to handle a hundred forms through State channels and keep everything in shape to go through the General Accounting Office at the end of the journey.

If and when the new Civil Works program gets under way, we can guarantee you at least 15% more efficiency if you can divorce us from the State Administrations; and I might add that they, on their side, would cordially agree with that, because our jobs do not fit well into their routine and so we cause them a lot of trouble in revamping their methods to fit our peculiarities.

Again our desert gods were with us and gave us an ideal month of fine weather. It is getting to the point now where the lovely weather is hurting the ranges and storage water in the reservoirs. Precipitation over our district is badly needed even if it does interfere with our work.

MONTEZUMA CASTLE NATIONAL MONUMENT. Martin L. Jackson, Custodian.

We open up this month with the following good report from Jack:

"Dear Pink:

During the past month visitors to the Monument have totalled 960, of which number 329 made the climb into the building. Nineteen states and two foreign countries are represented. The heaviest day of attendance during the month was 126 on a Sunday, when a group of C.C.C. boys visited the Castle and a great number of local people came to view the excavation work going on here.

"The weather has been practically perfect, and roads suffered only from corrugations and dust. Old timers say this has been the mildest winter they can remember, both as regards storms and low temperatures. Day before yesterday we had a light rain, the first of the winter, and some snow fell on the surrounding mountains, but unless we have a good storm soon a lot of cattle may not last out the winter. It seems that in truth the Verde Valley is becoming the Valley of the Sun.

"In addition to visitors this last month I have had two technicians, one clerk, one ranger, one museum attendant, twelve mules, one horse, some badly worn wagons and scrapers, and a lot of grief; and judging from some letters received from your office I believe you to be the authority for the saying that 'The first twenty years with the Park Service are the worst.' However, besides helping the un-employed, we are getting things done on the Monument that we would have been crying for in the years to come.

"In regard to the C.M.A. work at the Castle:

"The main project is the entrance road, which we had hoped to finish by the 15th of February. Due to the fact that we are having to make some fairly deep cuts in a very hard formation, and that our workmen have been cut down to 15 hours per week, we are going to be crowded to have the job finished by that time. We are getting a good road, nevertheless, and it is worth the money even if the cost is a bit high.

"We have the brush cleared and most of the stumps dug on the boundary road of the campground. We will not be able to do a great deal more on this part of the job until the Landscapers come in and lay out the individual camp sites. Harry Langley writes me that he hopes to come in during the first week in February and straighten this out.

"We have taken out the wooden curbing around the parking ground and rebuilt it with the malpais stones laid in a concrete mortar. This wooden curbing was put in a year ago when the parking ground was built, but was intended only as a temporary measure as half of the area is a deep fill and we were afraid to build the permanent curb until the ground had time to settle. This piece of work has added a lot to the appearance of the area.

"Last but not least is a very interesting piece of research work being done at the base of the cliff just west and south of the Castle. The work consists of excavation and partial restoration of what we have always designated as the Lodge Rooms. This work is being done under the supervision of Earl Jackson. Appended is his report covering the activities to date on the project.

"In general, things look well here. Despite our difficulties, which are had by all of us, we are getting somewhere with our projects. We are making the Monument even greater than it has been in the past; visitors are showing great interest in the developments and considerable good newspaper publicity for the Castle has been written. In the Valley, a trace of optimism in regard to coming general conditions this year is evident, and, although said trace is very coy and elusive, it is still there, and will not be downed.

Cordially,
Martin L. Jackson."

The report on the Civil Works Archaeological Investigation at the Castle, by Mr. Earl Jackson, follows:

"The archaeological part of the Montezuma Castle Civil Works program began on December 18th, with a crew of ten workmen and myself. Although handicapped until a week ago by the lack of wheel barrows for removing dirt, we have accomplished something which we believe you will agree is quite worth while, to visitors and to archaeology. The data given in this report is accurate in so far as it goes, but of necessity at present is incomplete. In our final report on this work we hope to be able to present a complete chapter in Verde Valley archaeology.

"Our first work consisted in the digging of ten test trenches, eight at the base of the cliff in the section marked 'C' on the control map, and two at the base of the cliff below the ruin marked '3'.

"In 'C' trenches, pottery shards and charcoal were found to a depth of 10' 3" below the surface, with the bottom in river fill and clay at a depth of 11' 10". A crude 3/4 groove stone axe was found at 9' 3". In this section only one decorated shard was found, it belonging to early Hopi.

"In 'B' trenches, plain shards and charcoal were found to a depth of 12' 0" in river soil. Two well defined layers of charcoal were found, the lowest at 6' 2" below the surface, but no sign of a floor, and no decorated shards whatever.

"Two trenches in the fill of the slope in front of the Castle, in the section marked 'Research' on the control map, brought interesting results. One trench revealed signs of a stone and mud wall three feet below the surface, and the other, at a depth of six feet in the trash fill, revealed a perfect section of a clay pit house floor and wall. We are asking for permission to excavate these house structures in our

tentative schedule for continuance of Civil Works funds after the middle of February.

"The main part of our work has been the excavation of the large cliff ruin marked 'A' on the control map. As you know, some 32 rooms or remnant of rooms of this fallen structure were cleaned out under Government supervision several years ago, and our task is to complete the excavation of this ruin and restore it in part. Those rooms which were already cleaned out were on the cliff face, while our present work is atop the slope at the foot of the cliff. We have removed a veritable mountain of fallen wall and rock and are still engaged in the removal of this fill. Six large semi-cave rooms have been cleaned, and three other large one located and partially worked. Each of the six had at least one story on top of it, and one had two; so that already we know 'A' to have had positively no less than 41 rooms, and most likely at least 48. Signs of beam ends against the cliff run for six stories from the shelf on which the base of the ruin rests, so it is not preposterous to suggest a sixty or seventy room original building.

"The ruin 'A', as we shall call it in this report, undoubtedly burned down. Every room excavated on the lower level had fragments of burned ceiling timbers on the floor. This burning of ceilings, and subsequent collapse, would have caused the masonry walls to buckle and fall inwardly, as they appear in some cases to have done. With them went a good section of the cliff. Also, we do not now believe, as we did formerly, that burning of the building occurred while it was occupied; at least this was not the case on the lower floors. All of the floors on the lowest level have, underneath the charred ceiling beams, from two to four inches of stratified river soil and lime dirt, which shows positive signs of having been washed in by water before the ceiling fell. So that it must seem likely high waters or heavy rains flooded the people out of the lower section of their house, causing them to abandon it for the higher rooms of the same building or to flee to the sister house, the Montezuma Castle.

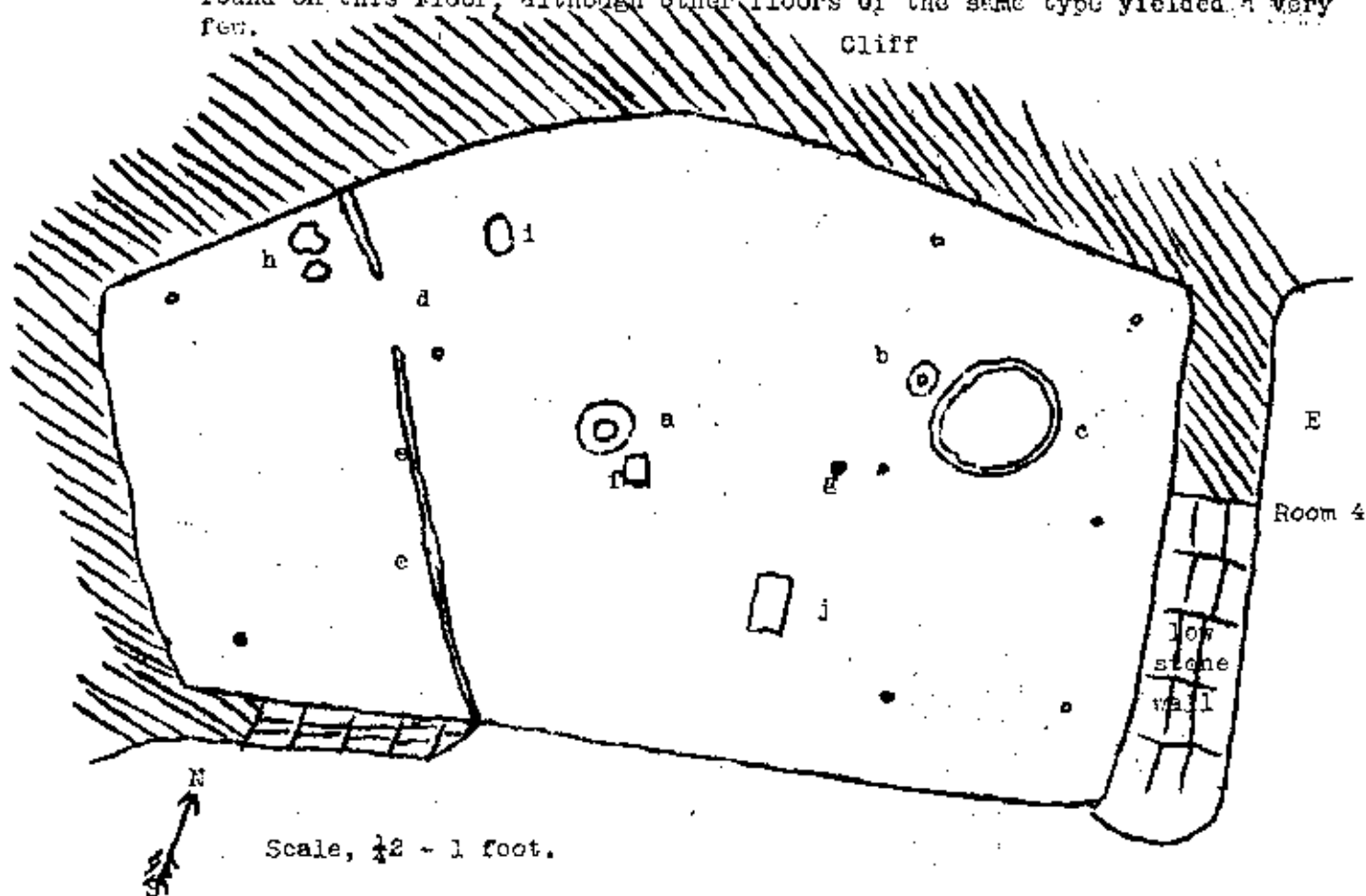
"Evidence to date suggests this building to be older than the Castle, although in its later occupancy its people must have been contemporaneous to the Castle dwellers. The main points in this evidence are:

- a. Older type of construction used in the base rooms of A.
- b. Lower percentages of decorated pottery in A to that found in fill in front of Castle building.
- c. Poor condition of pottery found, showing either greater age or earlier, poorer type of firing.

"For our old type construction, we cite two rooms having post hole arrangements significant of pit house supports for flat roofs, and no indication of any such wall structure; also two rooms having partition wall remnants of wattle walls, or wattle and daub, somewhat modified. These rooms have been dug out to half height in the soft limestone formation.

"One of these old type rooms has proved so interesting we plan to restore the ceiling and leave the whole thing as nearly like the original as possible. In place on the floor were found two large plain, Gila type ollas, both shattered but all pieces there, an excellent fire pit, with one of the ollas up against it where it had been placed to heat water, two metates, one a very large one and in position where it had been left, propped up at an angle on rocks so the squaw could work on it easier, a circular clay firing or baking oven about three feet in diameter, and a section of the wattle wall running the width of the room from north to south. The wall remnant is about ten inches high, and the sticks are gone, but the imprints in the clay which the vertical sticks left speak right out and tell us they were there. We have found so far only indications of vertical sticks, close together, running the length of the wall. Incidentally, not one decorated potsherd was found on this floor, although other floors of the same type yielded a very few.

Cliff



Scale, $\frac{1}{2}$ - 1 foot.

- a. Large Olla
- b. Small Olla
- c. Firing Oven.

- d. Doorway
- e. Wattle Wall.
- f. Fire pit.

- g. Post Holes
- h. Part of olla fallen from upper floor.
- i, j. Metates.

"These few could have been brought down in rat holes from the fill above, but of course we can't swear to that.

"The following sherd percentages are gained from sherds collected separately from fill over the rooms and from the floors themselves. In the fill we find that stratigraphy reveals nothing, so we present only the general count in the fill. The figures were worked out by Miss Sally Pierce, our laboratory technician, an archaeology graduate from the University of Arizona.

"A" fill to date:

Plain wares: 96.5%

Including a large percent of unslipped ware and a smaller percent of ~~unslipped~~ red slipped ware, sometimes polished and sometimes with burnished interior.

Decorated Wares: 3.5%

Including Black on White, Old Hopi Brown on Cream or Buff (Jeddito Yellow). Polychrome with Black and White on yellow-orange or orange-red, the black being in broad bands outlined in white, (tentatively we shall call this type Verde Polychrome), Black on Red, and fugitive white on Red.

"A" rooms, to date:

Plain wares; 95.3%

Decorated; 4.7%

Percentages of distribution of decorated wares in total:

Black on White: 64.3%

Old Hopi: 23.2%

Others: 12.3%

"Black on Red, fugitive White on Red, occur in about equal percentages. Aside from a good part of one corrugated olla only about ten sherds of corrugated ware have been found. One corrugated exterior and Black on White interior was found. Two or three sherds of Verde Polychrome have been found, although other sites on the Verde have yielded a great deal.

"We have a great deal to thresh out on pottery yet, but at present we cannot fail to acknowledge that Verde decorated wares, especially Black on White, show an excellent paste and an excellent firing. Trade influences in design seem to have been felt from all directions in decorated wares, while forms in plain wares show a higher proportion of Gila shapes. Much of the plain ware is of very coarse paste, and poorly fired. A few molded pieces have been found. The type we designate tentatively as Verde Polychrome we believe to be merely an elaboration of Jeddito Brown on Yellow, an addition of a thin white outline to the Brown or Black decorations.

"We have found no complete pieces of pottery, save for the two ollas left in Room 5. When the ruin fell it shattered practically everything that would break, and when it was abandoned very little complete pottery was left in it.

"A number of excellent manos and metates have been found; stone hoes; bone awls and daggers of bone; and a good collection of stone axes.

"Of ten axes found, eight were 3/4 groove, and two full round. One was double bitted. Two stone picks, one 5/4 groove and one full round were found.

"Three baby burials, all under one floor, were found in very poor condition, with no artifacts whatever, but with rotted traces of twilled matting in which they were wrapped. In one cave were found the badly scattered remains of three adult burials, but pot hunters of long ago had stolen the skulls and any artifacts that might have been there.

"All in all, although we haven't found so much spectacular museum material, we are tickled over this wonderful ruin we are uncovering, and are getting out some archaeological data that will furnish food for a lot of thought, and should digest into a lot of knowledge about the people of Montezuma Castle and vicinity; and if you will let us uncover that pit-house in front of Montezuma Castle, who knows, we may set the date of this local culture back about five hundred years!

"Here's to the next report and to see what the other fellows have written about their finds.

Earl Jackson."

AZTEC RUINS NATIONAL MONUMENT. Johnwill Feris, Custodian.

"Dear Boss:

"Were it not for the calendar indicating this as the 26th of January, one could hardly believe it other than a balmy May day with summer just around the corner. Old timers have lived here practically all their lives and report that, to date at least, this year has been the best for working conditions of any year known. Not one day has been really impossible to work. Early in December a flurry of snow made work for that day disagreeable, but with that exception every day this winter has been such that one can very comfortably work in his shirt sleeves. The high temperature for January has been 58 on the 24th and the lowest temperature 7 on the 13th.

"Visitors for the month total 131 which, while not unusual, is a good showing compared to our 53 for January of last year.

"January, up to the 19th, was one of the busiest months the Aztec Ruins has experienced under my supervision. We have had construction in progress in several instances but I have yet to see any group any more enthusiastic and willing to diligently perform the work assigned them than my group under the Civil Works Program. For an example, let me cite one of my workmen who, in the course of plotting work, was put to work in an adobe bank which constituted practically the equal of trying to dig into a solid rubber ball with a pin. The man worked all day at this work and that night had a hemorrhage as a result of

his very exceptional effort at the work assigned. From all appearances he was strong in every respect but unfortunately we were not aware he was an arrested tubercular case. The hemorrhage was not serious and the next morning this same man very willingly started to again undertake the work of the previous day. Fortunately for us, a friend mentioned to my foreman the experience occasioned after working one day at this difficult task and Mr. Thompson very tactfully assigned the man to work of a much lighter nature. During the noon hour the gentleman confided in Tommy his condition and mentioned particularly that he knew very well another day at the same work would have caused a recurrence of the night before but because we had shown him such consideration that he would not let us down and would not even at the cost of his own health, infer that he desired special privileges.

"On January 23rd at noon, at which time of course all the men were released because of the fifteen-hour week schedule, four individuals of my 68 men made statements much to this effect: 'Mr. Faris, we appreciate very much the work you have given us and appreciate the effort you are making with our interest paramount. It is certainly unfortunate that the work was shut down when you have so much outlying and we will willingly work free of charge to help get these projects completed and to demonstrate our appreciation for the consideration the Park Service has given us.' Such remarks as this, Boss, make us feel exceptionally proud and impress us more than you can know of the responsibility we are carrying regarding the welfare of our little community.

"We have employed, practically since the beginning of the Civil Works Program, 68 employees and of that number not one has been released totally because of inefficiency. We have, naturally spoken to several and warned them that this program was to get work done in addition to helping the individual and we expected a full days work of every man, but these occasions have been rare.

"Our projects of course are handicapped with the 15 hour per week basis but we are concentrating our entire force on the administration area in order that we can present a fairly decent area should we not be allowed to continue. You will find many features that are in need of just a few days work and if allowed to resume our 30 hour week, we can make a finished project.

"Project No. 1, moving the barn, is completed and at the request of the Landscape Division the rebuilt structure was oiled with old motor oil to destroy the conspicuous picture it presented from our Monument area. This oiling has accomplished the desired result and it is surprising how a structure of this size is as little noticeable after this procedure.

"Project No. 2, The fence, is awaiting final placement and will be completed by February 15 in every detail. We find that in putting in a new fence grading was necessary in several instances and our boundary

has been graded to enable us to put in fence suitable and applicable to a Monument of national standing.

"Project No.3, the parking area, is our big problem at the present time. It is not showing up very fast with only 2 1/2 days per week in which to work, but to give some idea I might say that Monday, the 22nd, in pouring walls, we used 102 sacks of cement in our mixer and the next morning our men determined to give the best that was in them, literally challenged each other to a more or less competitive operation and in only three hours, 9 a.m. to noon, we had poured 84 sacks of cement. Mr. Saunders, our Superintendent of construction, in estimating costs, has given us this satisfaction: contracting in Los Angeles he figures cement to cost approximately 30¢ to 40¢ per cubic foot and in our work we are putting our cement in the wall at a cost not to exceed 40¢. When you stop to consider that contractors work trained men with equipment advantageous to such work, while we have a crew not by any means expert in cement work; we have to heat our sand and water, cover our walls after pouring, etc., it is surprising that we are getting the efficiency that results show.

"We have practically enough boulders and sand on the ground to finish our wall and, believe me, we will have many piles of rock and sand if we don't get a continuation of Civil Works or some fund to allow our completing the wall in detail. For the continuance of our present program we will concentrate on this feature and endeavor to get all possible accomplished.

"I would like very much, under Project 3, if we cannot continue work, to at least be allowed to purchase approximately 400 yards of crushed rock to be laid as a base for our surfacing. We have funds available in our 'Other than Labor' appropriation to cover this and we can get the rock delivered here for \$3.00 per yard, which is, in this section, very reasonable. I strongly urge your support toward doing something about this rock now and I could much appreciate authority while so doing to crush enough rock for our ruin repair, which will necessitate quite a source of this material.

"Under Project No.4, General Clean-up, I hardly know how to take this particular project. To tell you that we have made an exceptional progress in our clean up work, look out of the window and see piles of rock, sand, building stones, etc.; I sometimes wonder that we have accomplished in the way of clean up, yet in a revision of our topographic map the topography will show up clearly the fact that wonderful strides have been made in cleaning up, leveling off, etc., of our Monument proper.

"You appreciate we do, of course, that clean up work is more or less dependent on completion of projects and we will not be able to show a finished project under general clean up until such time as the projects themselves are completed and their necessary mass disposed of. Under this project we are leveling the field due south of the ruins

ordinarily spoken of as the five series. For this work we are clearing debris away from our retaining wall several feet in front of the ruins proper, and it is surprising the way this exposed wall is setting off our ruin proper. We are all very much pleased with the leveling in general and I feel certain this exposure mentioned will add materially to the attraction as it exists.

"Project N6 5, Archaeological Reconnaissance, is undoubtedly worthy of special mention. Miss Adams is most efficient and her products are certainly a relief and probably more comments have been made about the ability and beauty of this work than any other feature of our Monument. Of necessity her work is tedious and slow and probably will not be completed even by February 15, but anyone acquainted with the mass of broken pottery and the number of pieces only partially complete, can readily appreciate that it is humanly impossible to have finished the work in the time specified. In this connection I would strongly urge your consideration to some means of her being employed until such time as this work is completed, since I have no idea when we might get such work again and if so I very much doubt the possibility of getting anyone as apt in this particular work.

"The indexing of museum specimens is progressing rapidly and surprisingly few complications are arising. We have several pieces that worry us considerably as to classification, etc., and have arranged for these problems to be condensed and we will present them to Bob Rose for his solution on his first visit.

"Oscar Tatman, under clean-up work, has encountered several most interesting points. We will give you a summary of these features as follows:

"Room 151. The length of this room is 92 feet 8 inches, east to west, and the width is 8' 9" at each end. The south wall, which is the main outer wall of the ruin, is constructed of quarried sandstone to the entire length of the room and the average height is 6 feet above the floor level. The average thickness is 26 inches.

"An adobe wall extends across the east end of the room and also along the northern side to a point 16' 7" westward from the east wall where it joins the masonry wall that continues to the west end. West wall is also of quarried sandstone.

"The adobe wall on the north stands 5' 10" high where it joins the masonry wall and is 30 inches thick. Reinforcements of poles averaging about two inches in diameter, lying horizontal and lengthwise in the wall, are alternated with brush or sticks up to an inch in diameter lying crosswise. In some cases these small sticks are laid diagonally through the wall. About three inches of adobe separates the layers of poles. The adobe wall on the east is identically the same in construction as the one on the north.

"Beginning at the east wall, a portion of the room had been previously excavated to a point 36 feet east. The foundation for a wall that had apparently existed at some period previous to the last occupation, is located 14' 8" west from the east wall. The top of this foundation is 3 inches below floor level, 26" in width, and extends to a depth of 16". It lies east and west and joins both north and south walls at right angles.

"Through the masonry wall on the north side, and 8" west from its junction with the adobe wall, begins the opening of a doorway into Room 190. Width of opening is 4' 2", height, 3' 8". The bottom of the opening is 18" above the floor level. This doorway extends diagonally through the wall from southeast to northwest at an angle of 35 degrees. No apparent openings through the adobe walls on the north and east sides.

"The entire portion of the room excavated at this time was filled with refuse to an average height of three feet above the floor. The remainder of the room was filled with fallen wall material.

Burials.

"Burial #1. About 15' west of the diagonal doorway, beside the north wall, and 18" above the floor was found the skeleton of an adult lying on the right side with head toward the east. The body was flexed and the skeleton was badly decomposed. To the left, or south side of the skull were two large decorated bowls.

"The skull only of another adult skeleton was found on the floor two feet east of the first burial.

"Burial #2. In the northeast corner of the room was found the skeleton of a child lying face up and body at full length, with head toward the east.

"On the right of the skull was a large Mesa Verde mug and a small corrugated jar. Both were covered with large sherds. Encircling the left arm was a bracelet of shells. The bottom of this grave was 10" below the floor level.

"Burial #3. Midway along the eastern wall and lying on the floor with the head to the south, was the skeleton of an infant. No pottery or other specimens were found with this burial.

Room No. 190.

"Length of room north to south along the east wall is 10' 2"; along the east wall, 10'. Width east to west along the north wall, 6' 10"; at south wall, 6' 6".

"The east wall is constructed of adobe and reinforced with poles and brush in the same manner as the adobe wall described in room 151. This wall is 30" wide and 5' 3" high. The north, south and west walls are of sandstone masonry and all four walls were plastered with adobe.

"The diagonal doorway connecting rooms 151 and 190 has been blocked with stone and adobe on the side ending in room 190. The eastern edge of this doorway is 28" east from the west wall of the room and the bottom of the opening is 6" above the floor level. Width of the door in this room is ~~28~~ 4' 4".

"Two floor levels were found; the upper level being 14" above the lower one. In the upper level, 45" from the west wall and 21" from the south wall, a fire place is located. The shape is comparatively round. Diameter; north to south, 23"; east to west, 29", both outside measurements. Depth, 14". Its walls are sandstone slabs standing on edge and covered inside with adobe.

"On the floor level were found parts of two large decorated bowls.

Room 191.

"The dimensions of this room are, 14' 3" east to west, 9' 9" north to south. The adobe wall on the west side is the same wall mentioned in the notes for room 190. It stands 5' 5" from the floor level in room 191. The north wall is of sandstone masonry and is 32" high at the west end and 18" high at the east end, the east wall is of adobe and is reinforced with poles and brush. Height at south end, 25"; at north end 10". The south wall is the same adobe wall described in notes for room 151. Apparently no doorways leading out of this room. Refuse covered the floor to an average depth of 1 foot. In this refuse was found a finely worked hammer, made of beautiful green stone. The remainder of the room was filled with wall material.

Burial #4.

"In the extreme southeast corner, and lying on the floor with head to the east, was the skeleton of an infant. A small globular smooth cooking pot was found at the left side.

Room 192.

The length of the room east to west along the north side was 29' 1"; on the south side, 29' 4". Width, north to south at the west end, 10' 10"; east end, 11' 8". Height of south wall at east end is 3' 11" above floor level and at east end of room, 2' 11". The east wall is 14" high at the north end and 22" high at the south end. The wall on the north side is 25" high at the east end of the room and 33" high at the west end.

"The west wall averages about 5' 10" high. Across the face of this masonry wall and starting at 6" above floor level is a band of green stone 10" in height and consisting of four courses of small stones. Starting at 35" above floor level is another band of similar stones, varying in height from 10" to 12". At a height of 4' 10" there is a band of thin sandstones about 4" in height. These stones average about one inch in thickness.

"A doorway 2' 10" wide, through the west wall, has been crudely blocked with stone and mud and later the crumbling fill has been bolstered with two abutments of quarried stone, built up from the top floor level. The top floor level was 25" above the lower one and approximately on a level with the present court level.

"At the east end of the room, 28" from the east wall and 32" from the south wall, is a circular pit that has been dug from the top floor level to a depth of 31 inches. The inside diameter of the pit at the top is 28" north to south and 26" from east to west. Diameter at the bottom is approximately 36". The bottom of the pit is lined with boulders and the sides are plastered. The adobe plaster and walls are red in color and indicate the presence of intense heat at some period though the walls are not blackened with smoke. A thin layer of ashes and charcoal occupied the bottom of the pit. A possible use for this pit was in burning pottery.

"In the bottom floor level, 6' 6" from the east wall and 12" from the south wall is a fire place approximately 36" in diameter, with a depth of 8". This is merely a pit cut into the floor with sides sloping gradually to the center.

"In the refuse below the top floor was found a very small decorated pitcher with handle broken off. A portion of a thin and finely worked sandstone was also found on the lower floor.

Room 193.

"This room lies on the outside of the main south wall of the ruin and extends eastward from the narrow passage at the southwest corner of the ruin. The length of the room is 85' 11" and width at east end is 14'; at west end is 11' 3". The outside wall to the south has apparently been a crude structure of boulders and mud. Only the lower course of stones remain. The eastern wall, where it joins the main wall on the north, is of adobe, reinforced with poles from the floor level to a height of 35". From this point and extending to an additional height of thirty inches the wall is of sandstone masonry. The main wall on the north has been plastered to the entire length of the room. No definite floor level could be found.

"Two animal effigies were found in the debris, both carved from sandstone.

"These finds are most encouraging, particularly since we have not made any attempt to excavate, but merely clean up unsightly mounds and mounds which interfere with our general program. In this connection, we are giving up offsetting our west boundary fence as planned, since by so doing we would expose and partially destroy a very interesting little unit directly in front of the old museum entrance.

"Our office work is presenting probably our most baffling feature. We have instructions after instructions telling us what to do, what not

to do, usually followed a few days later by instructions contrary to the ones noted and in many cases adhered to in preparing the necessary papers. Many forms required for the proper execution of the papers of the Civil Works procedure have not been received until days after the execution of the material demanding this particular form. We appreciate the patience shown by the Coolidge office in our ignorance, carelessness, seeming bull-headedness, etc. and will make every endeavor to comply in every detail to the desires of headquarters.

"We have enjoyed immensely the activities represented by the above report; have been encouraged by the spirit and feeling of our employees; discouraged many times by our own handicaps and short comings; but, taking it as a whole, we proudly point to January, 1934, as probably the banner month of our existence.

"The Custodian has been more or less confined to office routine and has made only one trip away from the Monument of any major importance, this being on the 8th and to Santa Fe in connection with contacting the State Civil Works Engineer and the State Highway Department regarding features paramount to Monument interests.

"We cannot, with the rush of our work, give a monthly report without repeating our appreciation for the help of our Field Headquarters in San Francisco. The offices of all the branches have shown a remarkable spirit of co-operation and we extend our sincere thanks for this spirit. Without it, work here would be handicapped to an extent hard to imagine and our efficiency impaired to a point of rendering practically little service compared to the aim and goal of the Aztec Ruins National Monument.

"With every good wish to your entire force, and especially to your clerical folks, we are,

Cordially, Johnwill Paris.

"P.S. Gosh, Boss, I had no idea that I was wound up to this extent when I started this report but my crew and the foremen have given me so much to write about, that, believe it or not, this is actually condensed, with the exception of the burial explanation. I have another three pages that I would like to include on our museum possibilities and we are, at this very minute, over in one corner with Chuck, a couple of draftsmen and me popping in and out, trying to formulate plans that are at least partially in keeping with our museum. Wait until you see these plans!"

Chief, Johnwill doesn't fool us a bit with this final, long, good report. We know that when Civil Works programs are a thing of the past and stenographers have gone the way of all lovely things, and he can't dictate but has to go back to the old hunt and peck system, his monthly report will shrink down again to one side of a sheet of paper.

But, let us be thankful for all we get, he covers the ground and leaves a pretty definite impression that things have been happening around his Monument in January, doesn't he?

CHACO CANYON NATIONAL MONUMENT. Hurst R. Julian, Custodian.

As we leave Aztec Ruins National Monument we might as well drop in with Mr. Julian and get his report on the doings at Chaco:

" Dear Boss:

"This will be one of the hardest monthly reports that I have yet been called upon to write. So many things have happened that if I set out to enumerate them, I am quite positive that no one would even begin to read a document of such formidable length.

"However, the monthly report usually begins with an enumeration of the visitors and their importance and place of residence. That too will be more a matter of guess work than of actual count this month. There have been parties of visitors upon the Monument every day this month; few of them have even had the opportunity to register. The book was, however, left where they could sign it if they happened to have the inclination and by chance roamed into the room where the book was kept. Upon it we find registrations from but six states. Possibly a conservative estimate of the number of visitors would be something like three hundred.

"The reason why it has been necessary that the visitors be estimated instead of counted is that there has been so much work to attend to in connection with the C.W.A. program that the visitors have received little attention. The University Archaeological Reconnaissance party has done their share of guide work, for which I am truly grateful. The reason why the estimated number of visitors for January is greater than the number counted during December is that the C.W.A. program has given considerable publicity to the Monument, and because the weather has been, with exception of the rather chilly nights, spring weather throughout the month.

"Elaborating upon the above paragraph, it is my suspicion that people in search of employment, agents, hoping to sell something either to the Government or to the workmen, and curiosity seekers have swelled the visitors count beyond that number which would have come to the Monument because of their interest in archaeology. Also there is the matter of the roads. There has been a Santa Highway crew at work on the road from Haynes to Grouping, and, until it snows again, we will have an excellent (for us) road.

" 'The God of All the Weather' seems to be in sympathy with our President and his plans for industrial rehabilitation. This winter has been a regular California winter (that is, 'unusual'). For the first time within the memory of the oldest inhabitant, snows, blizzards and storms have not prevented out-of-doors work from being done. The ground is frozen, but it can be worked, our water freezes but we are able to build fires at night that will keep it warm enough that we can work the morning of the next day.

"We are at last started earnestly and with effect upon the cataloging of the Museum, again thanks to the archaeological party. We have done some work on the plans for diverting drainage from Chetro Kett. Our boundary survey was, until we were prevented from spending our 'Other than labor' funds for transportation for the party, going nicely, and the dirt and rock walls are steadily piling up beneath the triple walled kiva at Pueblo del Arroyo.

"Dozens of little jobs that have needed to be done for the past year or two have been completed. The site of the subterranean chamber which was discovered by the Judd expedition has been drained, some of the walls of Pueblo Bonito that were falling the most rapidly have been secured, and we have made plans and surveys, drawings and illustrations for an elaborate improvement and conservation program for the Chaco which will keep us busy for several years to come even if ample funds are provided for the purpose.

"We have rented several rooms from Mr. Griffin, the rooms to be used as offices and drafting rooms, but are now at work roofing, with temporary roofs, some of the large rooms in the southeast corner of Pueblo Bonito which will be used for administrative purposes.

"The University tool room was placed at our disposal until we could get our own prepared. It, too, is inside the ruins, and the assistance, such as loaning us tools and equipment has made it possible to go ahead with the work at a pace that is, according to my opinion, remarkable, considering the handicaps of isolation of the Chaco.

"We have two boarding houses in operation and aside from a place to sleep in case of a severe storm, the workmen are fairly well taken care of. We have opened up a coal mine and it is in active production; that solved a very difficult fuel problem, and we are many miles from firewood. Every building in the Canyon is known as 'Hotel three-in-a-bed'; and, truly, every bed has three or more occupants, but we seem to like it.

"We did, like apparently every other monument, get our paper work balled up at the beginning of the job. This was partly due to the fact that there were no reliable persons with the necessary experience with the work and largely due to the fact that most of the instructions came to the job after it was too late to do anything about them. This condition was aggravated by the slowness of the mail system whereby letters are delivered across the deserts by any means available under the set of circumstances existing at the moment.

"We have two blacksmith shops in operation; one sharpens steel for the rock quarry; the other repairs the dirt moving equipment. In order that the blacksmiths and automobile mechanics would have a roof over them in the event of blizzards, we erected a temporary rock and mud building behind the Custodian's residence in exactly the correct position for a garage for the residence.

"Work is being done on the survey of the area in the gap upon which we have planned the administrative area. Maps will be made and the buildings landscaped, all according to the Richey plan. This is another advantage of having landscape architects and draftsmen on the crew.

"Some work has been done on the 'stairsteps' where the road leaves the Canyon to the north. This was necessary in order that we have the means of getting materials into the Canyon for our project.

"If I have overlooked anything of importance, it has not been intentional, and to write more would be to assure myself that no one would read any of it at all, except perhaps a few of us who are the most interested. Our advisor and confidant, J. B. Hamilton, has given us considerable of his time and attention during this period, and it is wondered how he manages to get around to all of us, but he does --drive.

Sincerely,

Hurst."

EL MORRO NATIONAL MONUMENT. E. E. Vogt, Custodian:

While we are in that neighborhood, we might also drop in with Evon and see how he is getting along:

"Dear Pink:

"Thirty days have passed since I sent you a monthly report of the doings around El Morro. Since then there have been plenty of doings and one is puzzled to know how to begin.

"The weather has so much to do with what happens between daylight and darkness at this altitude of 7,500 feet above sea level that there is no getting away from the notable and never-to-be-forgotten fact that sunshine has blessed us most all the time. It is either pure luck, or, as one of the Spanish American boys expressed it when speaking of the fine weather: "Es cierto El Presidente tiene mucho 'hallon' con Dios o como es que nos viene tan bonito tiempo"; which, when translated means, it is certain that the President has great pull, (influence) with God, or how is it that such beautiful weather comes to us?

"While it is true that the ground freezes on the cold, snappy, clear nights, yet through daily plowing we have been able to readily loosen the dirt so that the Fresno and slip scrapers could pick it up and deposit it in the great arroyo which had been washing an ugly scar from the water cave down across the landscape in the foreground of the south side of the cliff.

"Fearing a snowy spell, we put a good sized force at work on crossing this arroyo. For eight days we worked twelve teams and about 20 men on the job of filling in the ditch which was 15 feet deep and 20 feet wide in places. By blasting down the sides with dynamite, the men soon made two crossings possible to teams which then pulled in great quantities

of the dirt into the arroyos. It is planned to use the dirt from both sides and thus create a gentle valley there, through careful planting of grama grass protected by a nurse crop of some kind, we may be able to restore the sod.

"The word we received on the 19th relative to shutting down the work threw a shock into our camp, but they took it in good spirit determined to work out the 15 hours in a few days and then go home for a rest.

"We did not learn until the 22nd that all teams had to be taken off the job also. Up to that time, according to the estimate of our engineers, Mr. D. B. Clark, there had been 3,000 yards of dirt moved with some 9,000 still left to be moved into the arroyos.

"We planned the work for the next day at once and by 8 a.m. we had our entire crew of 58 men on work which involved no teams and no trucks. Luckily Mr. J. B. Hamilton arrived the night before and brought the news that the men would be able to work 30 hours per week again, so we got in a full day. Mr. Hamilton assisted us in sketching and marking out a trail on the east side where it was necessary to use the reversed spiral staircase method of trail building.

"Other men were put on lesser erosion dams and others on check dams along the trail leading to the south face inscriptions. Altogether, so far, we have built 25 major check dams into which have entered 150 tons of rocks, 75 wagon loads of cedar and pinon brush, 1200 cedar posts, countless yards of barbed wire salvaged from our old fence but serviceable for binding and reinforcing.

"During the month a force of men trained in Zuni Mountain logging camps was put to work with their cross-cut saws, teams, axes, etc., in the Box Canyon on a combination clean-up and erosion control campaign. They moved their camp round in the Canyon and did a fine job of moving a great deal of fire burning dead timber. The large pines, some of them 100 feet high, were cut down and sawed up, snaked into arroyos where dams were built with them to catch the silt of rain storms. Branches were used to fill in smaller washes. All this was done with a minimum damage to the natural terrain.

"After a great deal of correspondence and wiring, we were able to locate an archaeologist. Mr. Ted Arden, who came from Los Angeles, but who was raised at Farmington, New Mexico. Dr. F. L. Hodge, of the Southwest Museum, James H. Starna, of the Laboratory of Anthropology, Earl Morris, Clyde Kluckhohn, and several others, took a hand in the problem of locating our ruin.

"We consider ourselves lucky in getting Mr. Arden, who is experienced, careful and scientific in his work. Assisted by several good men he has been busy daily locating the corners of the ruins of the largest ruin on top of the mesa which he surmises about 300 feet square and cent in it about 600 rooms with a possible population of 1,000 souls.

"He is preparing a map of this ruin which we now consider one of the most important in the Southwest. The one kiva located thus far measures 30 feet across.

"Mr. Ansdén reports that there is a great variety of potsherds showing pottery from the Little Colorado, Chaco Canyon, Zuni, and many Rio Grande glazes.

"The pueblo stood three and possibly four stories high and was occupied around 1,400, A.D. One plastered room was found near the surface of the ground. Two roof beams were found and samples were cut off to send to Dr. Douglass for use in his study of tree rings.

"Mr. Ansdén is using the H. S. Gladwin method of reconnaissance and will carry his explorations over the eight or ten ruins on the Monument as well as those in the region round about. If time permits he will also conduct a careful examination of the entire cliff surface for undiscovered petroglyphs and Spanish inscriptions.

"Our saddle trail up the north face of the rock to the north ruins has been slow going and we had to make some changes owing to our inexperience in trail building. Mr. Richey and Mr. Hamilton have given us gentle but firm suggestions which we have followed out so that when the trail is finished we think it will look well, serve many years, and not spoil the natural beauty of the slope. The work here has to be carried on in shade all day as the sun shines but a few minutes on that side of the rock. Blasting has helped us speed up the work and we now estimate that no less than ten tons of rock had to be moved either by pick and bar or by blasting and fully as much rock of natural weathered hues has been brought down over the trail from on top to build the side walls of the switchbacks; the rock freshly taken out being glaringly white and quite out of place in retaining courses.

"While the teams are resting perhaps we can finish the trail over the top and down the east side. That will be our aim.

"The fence buying contract had been awarded but the order had not been let so we are faced with the possibility of not being able to enclose our Monument grounds. This throws us open to sheep, cattle, and horse trespass, since our old fence has been taken down. In case we are not able to buy the fence and complete the job our Custodian and ranger will hereafter be mounted and known as senior and junior herders.

"Mr. H. R. Little, an experienced surveyor of Los Angeles, arrived on January 15th to help Mr. Clark on surveying and mapping problems. He has now almost completed the surveying of the section and will accurately locate the boundaries of the Monument. Considerable difficulty has been presented by the fact that the original land survey which was made by Harmon and Pratt in 1881 is now very dim when it comes to corners. Witness trees given as 2, 3 or 5 inches thick were found

to be now 8, 10 and 12 inches through while a sheep corral near one corner has now entirely disappeared.

"Mr. Little will make a topographical map marking the monolith of El Morro, the inscriptions, trails, the water cove, washes, erosion dams, trees and canyons. This is especially desired by Mr. Richey and Mr. Hamilton to aid them in planning future work at the Monument.

"Discoveries have been interesting and fairly numerous. A water storage hole with prehistoric dam and pecked trail in the rock leading up from it; new pictographs, a cave with a single hand print pecked on the ceiling and an old carved trail leading from a dammed water supply, and two polishing places where stone axes were ground in the dim centuries past. Other ruins, caves, trails, etc., no doubt will be discovered by Mr. Amson's crew on days when the cold weather makes work on top of the cliffs unsearchable.

"The most helpful discovery was made through Rafael Dinch, aged Navajo Indian, who has lived almost all his life near El Morro. As a child he was taken by Kit Carson to Bosque Redondo where the Navajos were held by force of arms. He remembers the trip on a burro and as this occurred about 1864, he must be about eighty years old.

"I asked him one day how the Indians who lived on the El Morro mesa got their water. He said partly through rain water in rock pools and partly from the spring. I asked him, what spring? Then he told me that many years ago during a year of extreme drought, when cattle, sheep and horses died from lack of water and when even the running streams coming out of the Zuni Mountains dried back until there was no water, that in his desperation he started to dig for water in the Box Canyon below the ruins at a place where certain grasses led him to think there was water. By digging down about the height of a man he found a fine supply of water which watered his 15 saddle horses and 80 head of sheep all that dry season.

"He offered to show me the spot, so in the afternoon of January 10, he drove his little flock of sheep which he was herding down into the Canyon and there I met him. Together, accompanied by Mr. Clark, we walked up the Canyon almost to its end. Here he pointed out the spring about ten feet from the cliff where there is a shallow cupping of the ground which was well covered with brush and weeds. Rafael told me to dig here and water would be forthcoming. He told of broken pottery he had found there when digging there many years ago. This was an indication that this spring was one of the sources of water for the Indians who lived above on the cliffs many centuries ago. Old notched well curbing of cedar wood and a horn pine tree trough, burned in some grass fire, lying close by, were no doubt the work of Rafael that summer when it was so dry.

"I took some pictures of Rafael, myself and Engineer Clark at the time when the spring was shown to us.

"Mr. Asden is taking charge of the excavation of this water development and we plan to have a real Indian well ready to serve the public in a few days. I am taking out some rubber boots for the men who are digging the place out as they are now working in very damp earth only four feet from the surface.

"Our crew is all in good health and mood despite the cutting off of teams and trucks. All hope to be able to help finish up the big fill job in the water cove arroyo so that a finished project will be left there on February 15th.

"We feel that our savings in materials are worth mentioning since we have bought scarcely any tools and only the dynamite we needed for blasting, and tool steel for our capable blacksmith. The men have all bought their own froshes and scrapers and are furnishing them.

"The morning sun is coming up now, - red, which, if the old saying: 'Red in the morning, Shepard's warning' is true, means a storm.

"With regards to all,

E. Z. Vogt,
Custodia del Morro Monumento Nacional."

We at headquarters considered ourselves especially lucky this past month when Mr. Vogt and his charming Honorary Custodian Without Pay coming down to Tucson on a business trip dropped in with us for a few hours visit. It was a great pleasure to see them again and get first hand word of their work and how they were getting along. Now that they have found the trail, we hope they will come often and stay long.

We now move on down to where Tom Charles is operating the biggest Gyp. outfit in the WORLD. I hope Tom will please note that we have kept him off page 13 again in our report. Here he is:

WHITE SANDS NATIONAL MONUMENT. Tom Charles, Custodian.

"Dear Boss:

"This is a busy week. When Harry Hopkins' order to buy no more material came Friday, the White Sands project had just four barrels of gasoline on hand. You can guess just how long that would run a twelve truck plating gang on a ten mile haul. There were rumors that some one had been running too heavy on the 'Other than labor' money. Fortunately we were able to show 25% of our project complete, 25% of the labor allowance expended, and less than 20% of the 'Other than labor' used, thanks to Pete Rose and Murray Hanson, each exceptionally good at his job. We are still in the air as to what is going to happen, but we are fixed to run until January 26th.

"Walt and Chuck were here at the same time last week. We had one of those wild west sessions up at the house at which the bull was mercilessly thrown from immediately after supper until past eleven.

"I think that each possible angle of the White Sands development was discussed. Rose, the engineer, Hanson, Watchdog of the treasury, Cone, the landscaper, myself, Ruth and the Mrs. were all there.

"I did not have much luck in trying to convince Chuck that the Museum and the Custodian's quarters should be out on the Highway instead of three miles back in a cozy nook in the sands. Chuck is an ardent advocate of the split skirt idea,-- just a glimpse at a time for him. He thinks that all we should show out on the highway is a checking station and an ordinary ranger. The first peep at the real show, according to Chuck, should be at the entrance into the sands where he would present a nice parking area with rest rooms and shelter, a Museum with Indian artifacts, White Sands products, paint burros, white mice, long hooped antelope, and a Custodian. Next in Chuck's climax would be the Sands themselves, out where the snow white hills climb higher and higher as far as the eye can see. Even these hills he would use as suggestive of what was beyond. The end of the road would circle a large sand dune and on the leeward side of a big white bluff he would establish a second parking place with rest rooms and picnic grounds. But if John Public thinks that the Sands are his when he arrives at this place, he is doomed to disappointment. Chuck still holds him back. He circles him about with a deep ditch and a ridge of sand quite impassable to cars and Mr. man must climb these hills on foot. The idea is to keep these hills as clean and white as they were when we, the pioneers, first saw them. That will be some task for the men in charge, but I believe at that it is worth trying. At least I am willing to consent if and when a ranger is located out on the highway in comfortable quarters. The public is entitled to that much courtesy. There is no reason why a tourist rushing from the tremors and floods and fogs of California should have to drive down off the highway 3 miles to ask for authentic information about the great White Sands.

"You will be interested in knowing that we now have our 104 man C.W.A. project going full force. The first three miles of road has been completed except for plating. Nearly 4,000 feet of plating is done and it makes a real highway. As long as the weather is dry the plating should work nicely but it will be very slick when wet. The only other objection to this plating is that the clay beds are eight miles from the nearest point in the road.

"Our 60 H.P. Caterpillar and blade are far out into the sands. They handle the valleys very nicely but when one of the high sand hills is encountered it calls for the Texas mule and the Fresno. The soft places in the sand will have to be plated, but we hope the low places will pack down and harden and be good in wet or dry or there.

"The Sands are beginning to have their first visitors. The trails along the new highway are as bad as they can be and still be passable. The ruts are deep and full of flour-like dust, but each day there are

visitors who brave these hardships and drive out to the sands. When they get past the first barriers of yucca covered hills and wind blown pits, the going is good. For a quarter of a century it has been thought impossible to traverse these sand hills in an automobile, but today there are car tracks on most of the high points.

"It is time for that count again. The last of December I was all set for a count. I had been meeting cars on the White Sands Highway at the rate of 30 an hour. I wanted and prayed for an official count, but since the first of the year I make that 20 minute drive daily and meet 3 or 4 cars. This is no time for a count, Boss. Will you kindly forget it until the 11 inch rain in California has cleared away and the 10 below zero weather in the east has modified and cars can get on the road again from one end to the other,

Tom Charles, Custodian."

"P.S. Dear Boss: your request for a report on the archaeological findings in the Sands has been turned over to Mr. Lawrence Cone, of the Landscape Department. His report is herewith inclosed."

Mr. Cone's report, under the heading: "This We Know." follows:

"Now that the rush for news has come to somewhat of an end, due to the completion of the exploration work, it seems to be the proper time to stop a moment and report with a great deal of personal pride, for both Tom Charles, whose stories have been proven to be true, and to the landscaper on the job, to say, well, this is what we have found.

"This job of exploration took on an added spark of interest with the finding of the first error point, to say nothing of the day that I could tote into the office of our Custodian, the most looked-for discovery, that of the skinned foot of an antelope. We are sure that this long, curved hoof was from one of the antelope for the reason that everyone here says that it was the hoof of some other animal, none of them agreeing from what animal it came! It matters little now whether we have the sanction of the town on the truth of this statement, for the mere fact that one of our party found a thing on the first day has served to spur the rest on to better things and at this time we have in our possession some fifty complete arrow points and many fragments of points centering about the top achievement of the portion of a Folsom point. This last was the peak for the landscaper for up to that time he had not been able to find anything of enough importance to bring the Custodian to his feet with the all important remark: 'There, now, you have found something.' This was a big day in my life. Don't misunderstand, for I really think our Custodian is one very swell person, but the fact that I had found something out in those great sand dunes, seemed to the landscaper worthy of some recognition.

"The party, during the course of the work, has covered the entire Monument and in ground which most people told us was barren,

we really have done very well for having rarely picked up objects that were lying on top of the ground. All through this Monument there are mounds covered with fragments of pottery: Little Colorado, one piece of which was made by Little Colorado and later repainted by Rio Grande: Chupadero which had been painted but, through the action of the White Sands this paint had been almost removed, and last but not least, great pieces of El Paso or Alamogordo ware. There have been found several pieces which have not been named, but are of the coiled, or so-called, thumb nail pottery. Beyond the new road, which is rapidly winding its way along the edge of the Sands we picked up a small pile of human bones, which, up to the present time, have not been claimed and rest quietly on my bureau -- much to the discomfort of my landlady.

"There exists today a definite trail through the sands which has been identified by the older inhabitants as the Indian Trail and it surely is correctly named, for it is along this path that the most important items have been found. Also, along this same trail are water-holes about which have been found the tracks of the wild burro some of which are ^{possibly} ~~intended~~ according to recent observers, many tracks of the wild horse, and scattered tracks of the antelope. Dr. Dice, of the University of Michigan, found white rice and it was supposed that as the mice were like our common gray field rodents except in color, that the other animals out in the Sands might be governed by the same laws of environment - a theory which is still to be settled. One report that might be interesting to those discussing this question comes from one of the teamsters who, a very short time ago, saw an antelope that was of a much lighter shade than its brothers, and the man remarked that this animal was almost white.

"All of the mounds that have been discovered so far have been topped with ashes which in turn covered several other layers, each separated by about three to four feet of soil. The theory that has been developed about these regions has been that wherever the Indians camped they had their camp fires which baked the soil, which is mostly White Sand, thus solidifying it, and, as the wind blew the soil from about these mounds, the solid soil was able to withstand the breeze and, with each succeeding group of Indians seeking out the highest point for their camps these constant firings and bakings have left, for us to explore, these queer formations in the Sands. This, of course is a question for the archaeologists to prove or disprove. The fact remains that there are many mounds about the Sands, all of which are covered with ash and abound with broken pottery, arrowheads and chipped flakes.

"Our work for the present seems to be done on the exploration line. It now remains for the archaeologist to take our information and, with the authority invested in their power and our locations charted on the maps, to enter the Great White Sands, shovel and notebook in hand and investigate all of the evidence that we have in the first month of the week here located for their convenience.

"The work has been vastly interesting to all of the party working on the job, and, with this growing interest, has come to the fore a desire on the part of the citizens of the town to be out there, seeing for themselves just what we have located in places which they have considered merely a play ground. We are able to stand before them with the evidence in hand and remark: 'This we know.' "

Lawrence Cone."

Next we have a report from Homer Farr, over at Capulin, and I am wondering if Tom Charles will note that aspersions are cast in the last paragraph at some one who has been reporting Folsom points.

CAPULIN MOUNTAIN NATIONAL MONUMENT. Homer J. Farr, Custodian.

"I have the following report to make for January, 1934. With wonderful weather all this month, our Civil Works project has just been going along fine with no time lost. Our road work has been progressing o.k. but, unless we are able to continue after the 15th of February I feel that we will not be able to finish our trails as we have so far put most of our work on the road. Anyway, we will be on the trails this week.

"Engineers Stewart, Williams, and Lyke, are still with us, having run the road, the two trails, the water survey, and are now running the boundaries to the Monument.

"Visitors have been about as usual this month. Although the weather was extraordinarily fine how could the Texas and Oklahoma tourists know that in advance? So only a little over four hundred ventured up on the Volcano this month.

"I have had some inquiries from some professor in Iowa this month regarding some specimens of this volcanic region to be analyzed by him. He stated in his letter that he hopes to prove that the lava beds in Iowa and Nebraska were from this old mother volcano. I expect to hear from him again soon and will give the results in my next monthly report.

"Efforts are being made to place a large view finder with a strong telescope on the very top of the volcano and through this one may see over into Kansas, Oklahoma, Texas and Colorado, and especially many high mountain peaks, such as Pipe's Peak about 160 miles distant, Baldy, about 120, and many other high peaks of less importance. No; you cannot see Mount McKinley on hazy days.

"Our crater here is still dry, for which we are very proud indeed. We understand that Crater over there in Oregon happened to be in a rainy district in that wonderful state and as a result is now almost filled with water. Too bad.

"Five arrow points which were used by some prehistoric Indians about 30,000 years ago have been unearthed near our Monument at the little place called Folsom, whence the name of Folsom points being given to them, since this was the first of their kind to have been found. This discovery was made in 1928. One of these Folsom points may now be seen together with the shoulder blade of an animal in which it lodged so many centuries ago, in the Colorado Museum at Denver. Also, one may see at this museum the complete skeleton of one of the rare and extinct buffalos, from one of which the shoulder blade mentioned above was taken, and Dr. Barnum Brown has estimated the age of the bones as given above. One of these very peculiar fluted Folsom points went to the Denver Museum and the other three are in the Museum of Natural History, New York City. One is led to wonder why the mighty eruption of this old Volcano, which is said to have happened in the last few thousand years, did not overflow the spot where the Folsom points were found, but upon closer observation it can be seen that the principal part of the lava flow here from this Monument was south instead of north where the points were discovered.

"In these days of progressiveness and competition for head-lines I would not wonder if some one before long might claim to have found the original Folsom point, but really we found it up here at Capulin National Monument four or five years ago!

Homer J. Farr,
Custodian."

Some one might raise the objection that if Iowa and Nebraska have high-graded some of the lava beds from Capulin, and Tom Charles is trying to get away with some Folsom points, a high powered telescope mounted on the top of the Mountain with the Custodian four or five miles away, isn't likely to last long. Collecting Capulin telescopes is likely to become one of the newest fads among visitors.

BANDELIER NATIONAL MONUMENT. M. O. Evenstad, Acting Custodian.

"Mr. Evenstad reports, under date of January 27th, as follows:

"Dear Boss:

"As only occasional groups visited the Monument this month, the total is 72. The greatest part of tourist travel must be taking the southern route as our weather has been ideal throughout the entire month, yet we had this comparatively small number of visitors. Occasionally the thermometer would drop to zero, but that is all. Our activities have continued almost without interruption on both E.C.W. and C.W.A. work, with the exception of the curtailment of C.W.A. due to the order of the 19th.

"During the month most of our activities were concentrated on the road leading into the Canyon, although the water line claimed some of our attention. Both E. C. W. and C. W. A. labor were used. Three

rented trucks started work on the second. The road is now completed to full standard width from Station 0.00 near the utility area to Station 34, just at the drop-off into the Canyon. We will therefore be able to push the work along much more rapidly on the remaining part than heretofore. The completed portion takes in the building of a rock retaining wall 225 feet long and averaging 30 feet high across an arroyo end. The rock for this had to be quarried and hauled about 8 miles.

"We have been somewhat short on equipment as the Forest Service took back all the large equipment we had borrowed. The implement we miss most is the ripper, as another seemingly cannot be had for love nor money. Picks and shovels are a poor substitute for this implement and we only partly compensated for its loss by rigging up one of the bulldozers with ripper blades made in the shop.

"The two inch pipe line was extended for a distance of approximately 3,300 feet beyond the point to where the Army furnished pipe staying at a minimum depth of four feet. This was further than was at first planned but was necessary in order to get sufficient head to give a satisfactory pressure at the Ranger cabin. The line was teed off there and run up into the yard near the station and a hydrant and fire hydrant were installed. The plan is to carry this short line up to a cistern some little ways above the cabin so as to insure a supply of water regardless of gallons consumed on the main line. A fire hydrant was also installed near the hotel. The intake is as yet uncompleted, but work will be resumed on this next week.

"The order curtailing C.M.A. work periods threw the work program temporarily out of gear, but with the resumption of the 30 hour week, our prospects are good for completing two projects by February, 15th, the Frijoles Canyon Road and the Water Line complete with its intake.

"Several accidents have occurred. One where a Government truck was taken by a C.C.C employee on a trip to Santa Fe, on the 13th. Coming back the driver upset the truck, completely demolishing the cab. No one was injured although four were riding in the cab. A hearing was held at the C.C.C camp and the offender was given a dishonorable discharge. A C.M.A. worker was fatally injured on the 18th. He and another C.M.A. employee were holding a road plow which was being pulled by a tractor, when the plow struck a rock and broke the coupling chain. This caused the plow handle to strike the man in the stomach resulting in internal injuries. He was given medical aid by the C.C.C camp doctor and taken in an army ambulance to the Indian School Hospital at Santa Fe where he died on the 23rd. The inquest held on the 24th pronounced the death due to an unavoidable accident.

"Another C.M.A. worker was taken to the hospital on the 18th, suffering with pleurisy and congestion of the lungs. This was brought on by exposure while working on the pipe line ditch. He had gotten wet and did not report it until quitting time. He was then taken to

Canyon Frijoles.

Grotesque formations,
Aged and crumbling,
Waterfalls tumbling,
To bed rock below;
Jagged cliffs shearing
A thousand feet downward,
Rugged, inspiring,
Stark beauty aglow.

Homes in the cliff walls,
Hand chiseled, smoke blackened,
Trails in the Canyon,
Trails over the rim;
Remnants from life
Of a race long forgotten,
Fragment of history
Unwritten and dim.

Silence and grandeur
Enfolded in mists
Of races and ages
Forgotten and gone;
Silence, but haunted,
Canyon Frijoles,
Haunted with whispers
Of footsteps gone on.

Alton R. Pruitt.

the C.C.C. camp doctor for medical treatment, who ordered him taken to the Indian School hospital where he was discharged on the 24th, fully recovered.

"The archaeological reconnaissance party, consisting of Paul Reiter and two skilled men, worked on field work, mapping ruins until the 23rd when they went to Reiter's office in Santa Fe to complete some mapping details. For your information I am quoting below his report on their activities:

" 'The archaeological field party working at Bandelier National Monument, spent a most profitable month. Two operations were partially completed, and now are progressing as rapidly as the fifteen hour limitation will permit.

" 'First: The Community House ruin is being cleaned thoroughly. The sand and other debris which has accumulated since excavation is being removed down to the floor levels. The fallen blocks of tuff are being replaced, although, because of the cold, without mortar.

" 'Second: These preliminary measures have laid bare enough features to warrant making one of the scaled drawings inaugurated by Lyle Bennett at Mesa Verde recently. This work, done with a transit, is very exact, recording wall bulges, visible floor levels, wall joints and intersections, etc. The past month has brought this division of the work to the drafting stage, which is being done in one of the offices of the Museum of New Mexico, where drafting instruments were borrowed. At the present rate, two weeks will complete this part of the work.

" 'During the cleaning and re-excavation of the Community House, a careful watch was kept for stray potsherds, tree-ring specimens, etc. Although unfortunately no tree ring data was obtained, several other specimens were found.

" 'When the scaled drawing of the Community House is completed the party plans, if agreeable to the Superintendent, to transfer its attentions to the excavated talus rooms, continuing its program of cleaning and surveying. Another task which might be attempted would be the tabulation and condensation of all obtainable archaeological publications relative to the ruins of the Monument.

Most sincerely, Paul Reiter.

"I believe that one of the finest things that can be worked out under C.C.C. work is something like that just written up by Mr. Reiter. I hope we will be able to extend activities to wild life survey and geological and naturalist features. Although the work, from its specialty, limits the number of workers to a very few, nevertheless I think we have an opportunity to do some work that under conditions different from the present would seldom be undertaken.

"Mr. Albion Blinks, who was appointed as a landscape foreman on E.C.W. work, reported for duty on the 16th. This job has been un-

filled for a month.

"On the whole, the month was profitably spent. Good working weather prevailed, although, due to the cold nights, there was difficulty in starting the trucks in the morning. This was remedied by building doors on the truck sheds and installing a box wood heater, which kept the sheds warm through the night.

"Our expenditures for the month for E.C.M. work ran rather high, mostly due to using much more dynamite for blasting than was expected. The tuff rock is very difficult to blast, and it does not cleave like ordinary rock but has a tendency to crumble so good action is not had. The materials for the pipe line was also another considerable item. In another month we expect to operate on projects where materials costs will be less.

"A sign advertising the C.M.A. project has been prepared and erected just at the entrance of the new road. It reads:

Federal Project 2003-C
C.M.A.
Extended to Standard Width
Frijoles Canyon Road
Bandelier National Monument.

"The sign is 4 by 6 feet in size and shows up well.

"Congratulations to Hugh Miller for changing his status. I think he showed excellent judgment in picking nationality. We wish him much happiness.

H. O. Evenstad,
Acting Custodian."

GRAN QUIVIRA NATIONAL MONUMENT. Mr. W. H. Smith, Custodian.

Mr. Smith has been very ill during the month and at this writing is slowly getting better. We hope he will soon be completely recovered and back on the job. In the meantime the work has gone on and the following report has been received from the Monument:

"Dear Boss:

For the month ending January 20, I have registered 370 visitors who entered the monument in 63 cars, horseback parties and otherwise. This shows an increase of 308 visitors over the same period last year, with cars in proportion. Although all of this is not due to the increase in travel in general, as we had a winter last year which made the roads impassable a great deal of the time: this is not the case this year. However we can readily see that travel is also increasing, which accounts for some of this gain. The President's program is putting a brighter outlook on the near future.

"Among our tourists this month we had Chuck Richey and his wife, of the Landscape Division, who were here on the 15th. Mr. Richey suggested a few minor changes on our approach road which will better the appearance of our Monument. He advocated some curves in the lower portion of our road. On the morning of the 7th Mr. Walter G. Attwell, of the Engineering Division, was here and he heartily approved Mr. Richey's suggestions. We also had a surveying party composed of Mr. Stewart, Mr. Williams, and Mr. Lyke, a few days during this time; who gave us finish stakes on the road and surveyed the parking area. On January 21, Mr. J. Bart Leck, President of the Cavern Supply Company, of the Carlsbad Cavern National Park, was with us. On the 22nd, Mr. Lansing B. Bloom, former Secretary of the American School of Research, of Santa Fe, was here with Mr. Fred Harvey.

"The C.W.A. work on our Monument is going steadily forward and we are going to be able to accomplish a thing which we have been ~~needed~~ needing for many years. I am pleased to report that we have a crew of men who are really appreciative of the opportunity to earn their wages and who are giving value for every dollar they receive. We have moved a lot of dirt and I don't believe that with the equipment we have to work with, a contractor could turn out any more yardage for the money spent than has been done with the C.W.A. money on this project. We had to make some cuts in solid grey lime stone which is nearly as hard as granite. At present we have 50% of the road completed and surfaced. This has a cut of 5' 1" for some 140 feet in the above mentioned grey ~~limestone~~ limestone. Also we have made a fill of 5' 1" which is almost 200 feet long. This work under the C.W.A. is not only supplying work for needy people, but with these improvements it will be remembered throughout the coming years as one of the best of plans to obtain a much needed improvement as well as to sustain a group of people who would otherwise have had to depend upon the Red Cross.

"In the interest of our Monument and the touring public I sincerely wish we could be fortunate enough to open up some six or eight acres of this pueblo and have a way to take care of the artifacts we expect to unearth when this, one of the greatest Indian pueblos of the southwest, is excavated. It is hard to impress our tourists with the immensity of this prehistoric city with its hundreds of rooms, which, being covered, allows one to walk over them without grasping the idea that he is walking over one of the greatest, if not the greatest, prehistoric ruins of the southwest. As this ruin lies off the main through highways, and even off the better state and county roads, it doesn't have the advertisement it justly deserves. The tourists come here not expecting to find what we have, but when they walk over here after days of ruins, they are surprised and express a wonder that this place is not more widely known. I do wish we could open up a few hundred rooms to show them that they cannot realize as things are.

"The weather has been the finest this year I have ever seen in

this country in the seventeen years that I have been here. It certainly has been a great help to our work, and it makes it mighty nice for the tourists.

W. H. Smith, Custodian."

Coming back now into Arizona, we have report from the Canyon de Chelly National Monument which is written by Mr. C. A. Weintz, engineer in charge of the party working there. The report follows:

CANYON DE CHEELY NATIONAL MONUMENT.

"Christmas day of 1933, eight travel damaged engineers looked upon the mouth of the Canyon de Chelly with the relief that only weary travellers can experience. A bountiful Christmas dinner and the far famed hospitality of Cozy McSparron kindled an enthusiasm for the work at hand and a sincere appreciation for the wonders of this Monument.

"Since that date eighty square miles have been covered with primary triangulation and eight square miles have been mapped with twenty foot contours on a four inch to the mile scale. The south side of Canyon de Chelly has been detailed from the mouth to a point about two miles above the White House. Work has been extended along the north side of de Chelly and the tributary, del Muerto, to the mouth of Black Rock Canyon, which is just above Antelope House.

"About 25 acres of the flat around Thunderbird Ranch have been worked on a 40 foot to the inch scale and two foot contours. This detail work, when completed, will cover approximately two hundred acres, and will give sufficient data for the location of the National Monument buildings as needed.

"Six plane tables are being used with Navajo helpers as rod men and guides. Each detail sheet is tied into the primary triangulation and further secondary triangulation is employed as a check on elevations and traverse work. This has necessitated the building of Monuments and the crossing and recrossing of the canyons, but has resulted in a net work that can be used for a complete job. A rough terrain with an abundant growth of pines and juniper, vertical walled canyons, and difficult native trails make this country tough to map, but delight and surprise the visitor.

"In regard to the working routine, misinformation is often obtained from the Navajo, mainly because of his pride and unwillingness to admit his lack of the desired information. This has been overcome to an extent by picking men to guide only in areas with which they are familiar. On the other hand several of the Indians have shown great aptitude for the work, and the more intelligent have tutored their less fortunate brothers in the fundamentals of top-

ographic mapping. Considerable Navajo conversation, a pile of sand, and an irrigation ditch or two often accomplish the desired result. Several of the Navajos are able to point out on the map location of studio shots given and help in drawing the contours.

"Owing to the problems encountered in field work and the necessity of continued concentrated effort while detailing, archaeological reconnaissance has been limited to week-ends. The Canyon north of de Chelly, known as Slim Canyon has been searched and eight promising ruins with attendant pictographs have been examined. The canyon south of de Chelly has also been reported to contain interesting ruins, and a trip into this canyon has been planned.

"As soon as this monument has been made more accessible to the public by a good road it should prove to be an area of great interest to tourists. We are on the ground and fairly well lined up to complete a topographic map of the Monument. In the time left us we can complete the large scale map of the area designated for headquarters, but unless more funds can be secured to complete the detail work begun, it and all our primary control will be lost.

Clement. A. Weintz.
Engineer in Charge."

Chief, I wish you would make a point of seeing that this work at Canyon de Chelly continues through the 12 weeks of C.W.A. extension following February 15. I think you understand that just because it is one of 25 national monuments in this district doesn't make it a small proposition. This one Monument is as important as any one of several of your middle class Parks, and its development is bristling with administrative problems. The only way we are going to keep from making a lot of mistakes in that development is to have a good map of the place to start with. Here is our one chance to get that map in the next ten years, and when you offset the cost of the map with the cost of the mistakes we will make in the next ten years without it, the cheapest thing to do is to go ahead with the map while we have this party organized and going.

WUPATKI NATIONAL MONUMENT. Mr. H. S. Colton, Custodian.

"During the month we have had two parties working on the Monument under C.W.A. funds. One party of 21 men are working on the ruin of Wupatki, and the other of six men are working at Citadel, another group of ruins on the Wupatki National Monument, nine miles northwest of Wupatki. Because of a water supply, both parties are based on the Wupatki camp. On the Wupatki party we have J.L. Brewer Jr., Associate of the Museum of Northern Arizona, as foreman, Ben Broeck Williamson, Associate of the Museum, and Richard Van Valkenburg, archaeologist. Also a local architect and surveyor, with 17 laborers.

"At Citadel we have Dale King, foreman and archaeologist, Charles Steen, archaeologist, and Robert Harris as surveyor, with three men.

"Mr. Lyndon Hargrave, Field Director of the Museum of Northern Arizona, and the Custodian, who is also Director of the Museum, have been keeping in close touch with both parties. Mr. Hargrave also visited Kiet Siel, keeping in touch with Mr. Hayden and Mr. John Wetherill.

"At Wupatki Messrs. Williamson and Van Valkenburg cleared of debris the middens on the west side and excavated rooms on the east side. Much dirt was moved by truck to specified dumps and the fallen rocks were neatly piled. Room 4 was restored for use as a registration room and is temporarily used for an office and laboratory. Mr. Metz, who has charge of reconstruction has also continued the survey of the quarter section east of Wupatki, and is preparing a contour map of that area.

"At Citadel Mr. Dale King has restored Room 1, Site N.A.358, a small site below the Citadel, as a registration room for that portion of the Monument. Mr. Steen and Mr. Harris have worked on a contour map of the Citadel portion of the Monument, tying in accurately all sites.

Report on C.W.A. Project 10. Wupatki National Monument.

"The general plan was to clean up, excavate, and restore the large prehistoric ruin of Wupatki. Work on only one quarter of the ruin was projected.

"(1) Six trenches were dug to undisturbed ground on the west side; the fallen walls removed from the middens, the stone neatly piled and the dirt hauled away by truck.

"(2) A few of the rooms on the east side were excavated. This work should be continued until all are cleared up.

"(3) Room 4 was restored and the walls of room 49 capped. All walls should be capped.

"(4) Room 41 was cleaned up. There will not be time before February 15th to restore this room but it should be done in the near future.

"(5) Room 1 has been cleaned out and will be restored by the 15th.

"(6) The Northeast quarter of Section 30, T. 25 N, R. 10 E, which forms the east half of the Wupatki portion of the Monument, has been surveyed and a contour map prepared, 200 feet to the inch, with 10 foot contours. This section completes the map of this part of the Monument.

"The Museum of Northern Arizona established a camp, built a shack, 36 by 12 feet and loaned Project 10 four portable houses 10 by 12 feet. The ruins in the ruin have been restored in which four of the men have taken up their abode. The Forest Service has loaned a Ranger Cabin, water is handy, it is a good place for a

camp and the men are well cared for. The weather has been so fine this winter that the men have not lost a single day on account of storms.

"The work at Wupatki could be continued for two or three more months with profit. By that time all dangerous walls could be made safe, the most important rooms excavated, and all exposed walls capped."

Harold S. Colton, Custodian"

ARCHES NATIONAL MONUMENT. J. M. Turnbow, Custodian.

I have the following report from Mr. Frank Beckwith, leader of the expedition, for the week ending January 22:

"Last week I went alone to the Yellow Cat, camped in an empty cabin, slept on the floor without a cot or springs, cooked my own eats, and roughed and toughed it. That facilitates the work very much and I got a lot done; found dinosaur bones, and was happy with the results. Two other sections I will have to work in the same manner, Salt Creek from Turnbow's cabin to the river, with Winter Camp Cave added, and next the Devil's Garden area.

"I found the Yellow Cat region rich in remains of dinosaur bones. The first day I found some scattered, then every succeeding day I found other ~~findings~~ deposits, ranging from a few scattered little pieces up to larger and more abundant remains. That region is rich in paleontological evidences, and by all means some day should be thoroughly explored by some Government party. I find that the bones are much weathered. Erosion is fast, and frost and other agencies have shattered them into small pieces. In only one case did I find a large fragment, and that I judged to weigh about fifty pounds or a trifle more. I found parts of vertebra; many cross sections of ribs; a great many small pieces, weathered off from the main bone, all surface strewn. The most careful search that could be given in the three days in before I was moved, failed to find any bone in situ (with one exception to be given) so that at this time I cannot recommend that my party do any extensive digging.

"The one exception is as follows: Our cook, Heber Christensen, worked at the Yellow Cat Mining District for several years and knew the area thoroughly. Once he sunk a shaft for vanadium ore and about ten feet or less from the orifice of the shaft ran into a large dinosaur bone about four feet long solidly embedded in and below a massive sandstone layer (which is odd for a bone to be thus found -- usually in softer material). He changed the course of his tunnel and left the bone in situ. So I had him, Custodian Turnbow and Jack You Von, the foreman, come to me Wednesday so that Christensen could show me the bone. He led us to the shaft, as was correct. There was no doubt, but the material, but solidly

overlain with massive sandstone, was the bone, which is still embedded and not fully exposed; only one surface may now be seen. There is four feet of it as judged. I take it to be a leg bone, but won't say which one, as more work must be done on it to identify it.

"Archaeological evidences at Yellow Cat:

"About 300 yards from the spring at Yellow Cat, on the sandstone ledge near a cow wallow there is the following ONE group of petroglyphs:

"Two men bifurcated form, showing legs, not well done.

"Two deer. (?)

"One man on a horse;

"Hence the group is recent and of no value archaeologically.

"No other petroglyphs were encountered in that area.

"I haven't as yet worked the Devil's Garden area at all, except to visit it off pay day as extra and take a photo of the first arch that is to be found there. I have yet to go back to the second and larger arch and work the territory archaeologically near some scapae and some tanks, as the Custodian informed me that looked to him like good Indian territory.

"All this to do and I want three weeks to do it in!

"Up to the present time both the geologist and the surveyor are still unfinished with the first third of the area, namely, still at work on the Arches sector, making a detailed contour and geological map.

"The Yellow Cat area is not, in my opinion, worthy or needful of a profile map nor a contour map; merely sketch in the deposits, with locations of each relative to the arch, quickly done, with as little detail as possible, and the contour map is not to a close interval.

"The Devil's Garden area is long, hard to do, and if a close detail is wished, time is very short to get it done.

"Let me give some praise for Custodian J. M. Turnbow. He has run a ranch at Wolf Cabin, a scant half mile from the southeast tip of the Devil's Garden area, three miles from the Arches, and he knows the trails, the sights, and the country as a range rider would. He is an expert packer, been with several parties before this as packer and guide, is thoroughly practical, and just such a man as any party for the Government or any institution should have."

On January 30, Mr. Backwith again reports:

"I have put in the week under the care of Custodian J. M. Turnbow, who took me out in the field, camping at his cabin about a mile from the southeast tip of the Devil's Garden.

"I am very well pleased with the week's work. A short half mile from Turnbow's cabin we found a very satisfactory deposit of dinosaur bones, and I was greatly gratified to get for permanent use of Turnbow three nice large sections of vertebrae, the largest of which is about a foot in diameter. Two ends of what I think may be a fibula, of nice size, are well preserved. I have turned the three sections of vertebrae over to Turnbow, charging him with their care, for a permanent display feature in Moab, to show interested tourists that we have the stuff here, and that it is easily accessible. There is a little cementing to be done, which I will do for him some Saturday or Sunday. I have in mind putting the specimens on display in the Times-Independent office for publicity, as the editor is thoroughly in accord with our work, and quite willing to favor it with publicity and storage room.

"Within a long half mile from Turnbow's cabin, over a trail which will thrill the tourist, either as a horseback or foot journey, is one of the most beautiful arches in the entire area. Vertical sides rising say 40 to 60 feet, then the arch-over, and it is all very delicate and very pleasing, and in such a location as to command as the dominant feature the whole setting.

"I also visited Winter Camp Cave, where I found ten petroglyphs, nine of deer and one of what may be a man on a horse. They are on very soft sandstone which wears rapidly. These were found within the entrance to the cave, partially protected. This next week I will put two men on that cave to do some thorough, careful work, and will catalog all findings in due, professional, archeological manner.

"Next week I will issue the order that as soon as the engineer and geologist finish the Arches they should move to Yellow Cat, and after that work is done, lastly visit the Devil's Garden. I have marked Yellow Cat with yellow flags for those points which I wish them to locate in their survey, being deposits of dinosaur bones and the cave with the one bone in situ.

"I have marked the one arch in the Devil's Garden for them. I will spend the next week near Turnbow's cabin on the cave and dinosaur deposits, and the week of February 5 to 8 at Devil's Garden on my own hook, whether the surveyors are ready to move there or not, and locate the principal points of interest.

"The men are enthusiastic over the resumption of the 30 hour week, and all is smooth at the camp.

"Mr. Turnbow wishes me to suggest to you that you have in mind the development of a trail from the Arches mid-section to a spring just north and down the hill, so that in summer water can be gotten there. He thinks such a trail would probably cost \$150. I recommend it. It is distant from the mid-section of the Arches about a full quarter of a mile direct line - maybe more by trail - and not too difficult.

"Turnbow wishes to be authorized to make a trail fairly close to the sides of the Arches area from Balanced Rock to Double Arch, a distance of from one and a half to three quarters mile. It is advisable, and will cost about \$200 to \$300.

"Another trail, to the river, site not yet chosen, would be good for the tourist. Fine view. Will be a valuable feature if the main traffic to the Arches is by making Willow Spring the camping spot, and horseback to the Arches."

Under date of January 28th, I have the following report from Mr. Turnbow for the month:

"To the Boss:

Our archaeologist, Frank Beckwith, has failed, even after five weeks of intensive research to find within the Monument boundaries, evidence of the occupation by ancient Indians; says they just simply aren't there. He found a group of 'recent' petroglyphs near the southeast end of the Devil's Garden, and another similar group at Yellow Cat; both of these groups are of deer, and each has a man on a horse. No other evidences of the Indian in the area were found except a few trivial relics.

"But as to dinosaurs, he is wallowing galore in dinosaur bones; has heaped up finds of them all over the landscape. In Yellow Cat he was nearly distracted; they were that plenty. Almost every hill had some on it, and two finds were almost worth while, even for a paleontologist -- that is, he almost admitted he was satisfied. One find made a heap of nearly 200 pounds, with the biggest bone about the size of a water bucket. Another find was a bone lying in massive sandstone, in a vein of vanadium bared some years ago by a miner digging for that ore. This bone is nearly complete, of the lower leg, about four feet long, but only partly exposed in the hard rock. It will be a very attractive thing to take the tourists to -- chock full of interest, and when their appetite is whetted on that bone they can be taken to neat piles of them in the area.

"The paleontologist, (which they tell me is a long name for 'bone digger') was tickled plumb pink, vying with the red beds in which he found the bones. He says in fact: "That never before in one small area has he seen so many finds of dinosaur bones."

"Then he came to my cabin, about a mile from the southeast end of the Monument area, and there found a small but good deposit, with another large bone; later, he was taken to a deposit to the east, about half a mile from my place, and there he got and put into my care, charging me with their safety, three large vertebra sections, the largest nearly a foot in diameter and nicely preserved. These he had packed to town where he will do some cementing and place them in the newspaper office for publicity, with the injunction that they are Government property, so that tourists and men of science can see

that we can deliver the goods when it comes to dinosaur bones.

"There is one more area yet to be worked -- namely, the Devil's Garden area, in which there are two major arches; and we hope the archaeologist will there find something as, in the immediate area of the Monument, there has as yet been discovered only a few minor things.

"Roads, roads, roads. We cry for them. About nine miles of them from the main highway to the Arches. Over 'slick rock', and the man who invented that combination must have had a sense of humor, for they are the roughest going roads a car could travel over. Yes, we need roads. Just now one can drive to our camp ground in low and second, but not in high.

"And trails: We need trails to water, trails to the double arch, trails past the caves, trails to the river. It seems we need a lot of trails.

"And markers on those trails. A marker to tell the tourist to load up with water, as there is his last chance; a marker for the first arch encountered on the way to the Arches proper; a marker at the blind rock; a marker at the Double Arch; at the Arch in the Making; at Massive Arch; at the Great Oval Arch; at Turret Arch; at Elephant Arch; and a marker for the several faces that may easily be made out on the cliff walls. There should be a marker for the horse back ride to the nearest dinosaur bones; a marker for the next nearest; and, if all are marked, nearly a dozen at Yellow Cat.

"An arch on the rim at the Devil's Garden may be seen from near our camp across the valley; it may also be seen from a cabin at Yellow Cat. Another arch in the Devil's Garden area is out of sight of the usual horse back rider, and is known to only a few who have been conducted to it.

"Aside from roads, markers and trails, and a cabin for the Custodian, we want nothing as we have our message for the tourist and can give him an eyeful of the choicest bit of Arches he can find anywhere, and one unique in our nation -- two full grown Arches rising from one butment. We have everything for the tourist but the means of getting him to see it -- roads, trails and markers. We have scenery of a most inviting kind but a damned poor road to it; we have dinosaur bones in heaps, but no trails to them; and the Custodian, being modest in speech, needs markers to help tell the story.

-----J. F. Turnbow, Custodian

As we come down out of Utah, we might stop by and get the report of Leonard Hutton: HE HAS BEEN (LEFT) BUSY THIS PAST MONTH AND HAS DEVELOPED A METHOD OF WORKING OUT HIS BEST PROBLEMS WHICH WE COULD ALL COPY TO VERY GOOD ADVANTAGE. PLEASE NOTE IT.

PIPE SPRINGS NATIONAL MONUMENT. Leonard Henton, Custodian.

"Dear Boss:

"I pause long enough to get you the monthly report, leaving the worries of studying the C.M.A. instructions and reading matter, planning work for the men, and wondering if I will get these projects I have started finished by February 15.

"I regret that my count of travel is not complete this month, but I have been so busy with the work that I have not been able to keep an accurate record. The following is what I put down as I had the time:

Arizona cars-----	88	people,	223.
Arizona trucks	37	"	84
Utah cars-----	17	"	45
Utah trucks-----	17	"	33
California cars---	8	"	24
U.S.I.D. car-----	1	"	2
N.P.S. car-----	3	"	5
Horse back-----	-	"	38
Live Stock-----	-	-	128.
Totals-----	171	454	128

"Our travel is still on the decrease and I expect it to continue that way until April or May.

"We have had one of the most unusual winters that I can ever remember up here. For the last two weeks there has not been ice on any of the ponds, and the days have been just like spring. It has even been so warm that the men have shed their coats and used their shirt sleeves to wipe away their sweat. On the 15th, while starting some of the men on the sheep spring, I found five dandelion flowers, something that has very seldom been seen at this time of year. The buds on the trees are swelling like it was spring. The birds are still with us, bluebirds, robins, sparrows and two ducks. Today it is somewhat colder with a storm in the mountains north of us. But I still hope that we have good weather so that we can finish up the work we now have under way.

"Say, this C.M.A. work is about as good as a college course in Government management, and I tell you that if a fellow doesn't want to make any mistakes he had better keep all these circulars, letters, memorandums and so on in a handy place so that he can refer to them on a minutes notice. Then there will be some errors creep into some of his reports.

"With all the reading and rereading, I sometimes get so confused that I grab a shovel, pick, or anything handy and try and out-do the best man on the works, then after an hour or so I come back and work my poor head, planning what to do next and how it best can be done if we have to shut down on February 15.

"As I told you over the phone, all the minor projects are completed, and the projects on which we are now working are, the road, the fence, changing the trash, and the tunnel. If we are put back on the 30 hour week we will be able to finish them in good shape; if not, there will be some that will not be more than half finished by February 15th. We surely hope that our 30 hours comes back next week.

"In our road building we found several articles of interest like the iron pipe mentioned in last month's report. We found half a pair of U.S. chain rule hobbles; the sole of a child's shoe; a black walnut; Indian mill stones. All these will be on display when I can get shelves and cases for them.

"When work came on the 19th of the shut-down, the men had all kinds of questions for me to answer and most of them were feeling blue and wondering if the work would quit in a week or so, and some expressed themselves that they would like to see the work finished that we had started and not leave the job half done. I told them I thought we could finish up what there was on the road and maybe a little more.

"Mr. Rosell and his younger brother came in Monday, January 22, to do the surveying and map making which should have been done before we started the other work. They are getting along fine and will have the base lines run today. They figure it will take two weeks to do the work and are using some of my men to help them.

"The Indian Stock Men has asked several times if any thing more has been done about dividing the water, but I have not heard a word except what Dr. Farrer and Mr. Shabel told me. I have moved the Indian pipe line from the east pond and will re-lay the line from the west end of the west pond soon.

"I will continue the report of this monument next month.

Leonard Hutton, Custodian."

We are checking up the clerical forces, bookkeepers, time-keepers, Custodians and Superintendent to see how many extra picks and shovels we will have to order to get this back work running smoothly. Hugh says our load wouldn't be too heavy. The system certainly has worked in Leonard's case as he has turned in some of the best papers in the district.

TUACACORI NATIONAL MONUMENT. George L. Boudney, Custodian.

"Dear Mr. Finkley:

We have had 1498 visitors for the month just past. Now that our C.N.A. project is under way, visitors have increased considerably.

January has been more like a spring than a winter month. We have not been bothered with rain up to the 25th. I got two men to help me and we got all of our 8,000 adobes under cover before any hard rains started.

"I notice many of the cottonwood trees have budded; the Indians say this is an indication of an early spring.

"The Landscape Division tells us that we will have to locate the foundations of all the buildings before landscaping and drainage can be properly carried out. We are excavating just enough to locate the extent of the buildings. We are finding indications of such pottery in some of the rooms. This pottery is the same both in shape and decoration as the pottery now being made by the Pima and Papago Indians on their reservations.

"In the pits made by the removal of the dirt for the adobes we are finding, at a depth of about five feet, quite a bit of the material which is of the Casa Grande culture. One metate shows that it was discarded because of continual grinding wearing a hole entirely through the bottom. Near this metate, under a pile of stones was found the skeleton of a man buried in the usual doubled up position. We excavated the entire skeleton very carefully hoping that in drying the bones might harden sufficiently to permit of its removal, but the bones were too wet and soon fell into powder. I got the skull out in a fair state of preservation. Three round balls of baked clay with a hole the size of a finger leading to a cavity within, were also found in the pit.

"The old church yard in back of the Mission is just filled with bones. The Indians did not mark the graves so that death might be kept secret from the enemy, and as the place was used for a hundred or more years as a cemetery and is not very large, naturally it is a mass of bones.

"In making a drainage ditch through the patio at the east of the Mission, we found, at a depth of two feet, beneath the old plaza, what is evidently an old cemetery. In a space two feet deep, three feet wide and eight feet long, we found nine complete skeletons and underneath them seems to be an untold number more. These bodies were all wrapped separately in yucca matting and as the beads are glass, both green and blue in color, it shows the burials were made since the coming of the Padres.

"About fifty smelters have been located in the vicinity of the Mission. When the Padres were not working the Indians in the fields they evidently set them to mining. In cleaning away a mound to the east of the Mission, we located near the bottom of the smelter a piece of metal the greater portion of which seems to be copper. The State Mine Inspector, Mr. Foster, was here today and he says that in

tapping the smelter a clay mold was made into which the molten metal was allowed to run and that the sixty pound mass we have is what adhered to the bottom of this mold.

Sincerely,

George L. Boudney."

CASA GRANDE NATIONAL MONUMENT. Mr. Hilding F. Palmer, Custodian.

"Dear Mr. Pinkley:

"January, 1934, is a thing of the past and we are due to report what we have accomplished during the month.

"The weather has been wonderful and we accomplished much under C.W.A. until the shut-down of January 19th. Since that time, working only 15 hours per week it has gone pretty slow, but we are struggling along, hoping that things will soon open up again. I had gotten along so famously with our ruins protection that it was a blow when the C.W.A. was curtailed. It was the first time since I have been with the Park Service that an extensive program for protection of the walls of the small buildings of Compound A has been undertaken. We had the curtain walls finished on the outside of the outside wall on the south end and west side when the stop order came. Some of the grading inside the Compound had been done. We were all ready to start back at the southeast corner with the inside curtain wall, but, since working hours were cut to fifteen per week I have done nothing except grading because had we opened up walls and built forms and then laid off until the next week before pouring the concrete, there would have been too much danger of a storm coming along and filling the trench with water to the ruin of the wall; so we are concentrating on getting the grading done and waiting until the program is opened up again and we can go at it on a full time basis.

"I can't tell you how much real good has been accomplished and how much more we can do if the C.W.A. is continued. This work is going to put our walls in shape so that when the Engineering Division who are now experimenting with materials, finds the proper weather-proofing materials we will be ready to go ahead.

"We are now making bricks out of fallen wall material to ship to the Chief Engineer for experimental work with weather proofing materials.

"The grading of Compound A is going to help in preserving walls because we are grading so as to take all the water out of the inside as soon as it falls. An inconspicuous ditch has been placed outside the walls so that the water will be taken away immediately to a low spot to the northwest of the ruins.

"The clean-up of the dead wood out of the trees and bushes on the Monument was continued successfully up to the 19th. This has resulted

in a very much improved appearance of all the trees around the administration building and residential area. In addition I think the trees and bushes will be benefitted by the removal of this dead timber. On the 19th this crew was transferred to the archaeological party for reasons explained below.

"One skilled carpenter has been engaged during the entire month in constructing some new museum cases. Our old cases were hurriedly built of cheap materials and were not the proper size, shape or depth for the display of our pottery and other artifacts. Since the original installation we have had time to study the problem thoroughly and now know what kind of a case is needed to properly display our materials. The old cases will be transferred to Tumacacori for use by Mr. Boudry in his temporary museum until such time as his new museum is obtained.

"The archaeological party worked the whole month full time. At the time of the shut-down on the 19th it was felt that this work was so important that no delay should be allowed to interfere with its completion and so the tree pruning crew mentioned above, were transferred to this project. The Superintendent works five days and half of his crew works the first half and the rest of them work the last half of that time. A complete report of the superintendent of this crew is submitted separately.

"So much for Civil Works; I am entirely satisfied with the results obtained and I feel sure we have had value received for every dollar expended.

"Public Works has been at a practical stand still during the month. We have done a few days work but all four of our force account projects are practically complete and the few little details to be taken care of yet have been put off until such time as there is more time for their completion. The total amount of these four projects is \$6,300 and only \$110 remains to be expended on them. The fifth project is a new employees' residence and working drawings were received on the 10th and forwarded to the Director for approval. As soon as this approval is received the bids will be called for and the contract will be awarded.

"Assistant Architect, Langley made one of his welcome tours of inspection during the month. We see all too little of Harry. Associate Engineer Attwell has been in and out a couple of times and given us a lot of good advice.

"F.P.119, Remodelling of two sets of quarters, is entirely complete and both quarters are now occupied.

"Under the regular appropriation one set of quarters was re-decorated for occupancy by the Chief Clerk of the Southwestern Monuments, who got himself married during the month.

"And last but not least comes our visitors' record and when I look it over I swell up with pride. We had a total of 2272 visitors who were actually contacted by the personnel on guided trips through the ruins of Compound A and the museum. These 2272 visitors came in 711 cars. This is an increase of 395, or 21%, over January 1933, and is a very encouraging sign. Every state in the Union except Maine and Vermont was represented. 51% came from Arizona, 13% from California, 4 1/2% from Illinois and the remaining 31 1/2% from the rest of the states, Washington D. C., Alaska, and five foreign countries. There were 271 trips through the ruins and 230 lectures in the museum. Visitors were handled efficiently by Ranger Fish and temporary ranger Seagoes with the assistance of the rest of the personnel during peak periods. In addition to the 2272 visitors who were actually contacted, there were 238 visitors who visited the Monument and used some of its facilities but did not visit the ruins and museum.

"The percentage of the out-of-state visitors to the total is nearly 10% greater this month than at any time since we have been keeping accurate records. Another interesting point is that 49% of the visitors were out of state but 51% of the cars were out of state.

"The weather has been wonderful; it has truly been a privilege to live in Arizona this month. The mean maximum for the month was 68.8 degrees with the maximum of 76 occurring on the 1st. The mean minimum was 30.2, the minimum of 20 occurring on the 13th. The mean temperature for the month was 49.5 degrees. Total precipitation for the month was .28 inches. There were 29 clear and two part cloudy days.

"Our new C. V. A. program after February 15th and applications and justifications for Public Works allotments were prepared and transmitted during the month.

"The best way I know of to illustrate what progress we have made is to quote the Deputy Sheriff of Coconino, who visited the Monument yesterday, (entirely unofficially), and remarked: 'I haven't been here for about two months and I find I'm way behind; a fellow has to come out here every day to keep up with the changes that are being made.'

Wilding F. Palmer,
Custodian. "

The following is the report of the engineer, W. C. F. Jolly, who has been on the Las Grande job during the month:

"Dear Mr. Palmer:

"The following is a brief outline of the work accomplished at the Monument by the Engineering Department.

"Starting at the U.S. survey monument 78' east of the parking area in the plaza, thence running easterly - distance of 78', thence northerly 250', thence westerly 110' thence southerly 250' thence westerly 112' to an iron monument, thence southerly 600' to another iron mon-

ument, thence easterly 121', thence southerly 397', thence easterly 80', thence northerly 397', thence easterly 99' to an iron monument, thence northerly 600' to the point of beginning. This run comprises approximately 8.51 acres of that portion of the Monument which is used for residential and administrative purposes and contains the administration building, residences, garages, tool sheds, etc.

"The purpose of this survey is to establish the exact location of all buildings and utilities such as water, sewer, power, and telephone lines, within the area on a large enough scale for practical location purposes in the field. The field work on this project is about 75% complete.

"Also during the month there has been a drainage survey made of Compound A. Grade stakes have been set at 25' intervals or inter-sections. Grade stakes were set on the south and west sides of the Compound, outside the walls to dispose of the waters drained from the compound.

"Work at the archaeological site has consisted of locating and mapping trenches, mapping the remains of old dwellings and floor levels that have been uncovered. To date there has been 10 dwellings or floor levels uncovered and some 500 objects or field specimens have been tied in.

"In the drafting room all the work done at the new excavation to date has been plotted. The drainage map of Compound A has been made showing the course and location of the exterior walls. This map shows complete information as to the correct location of all ruins in relation to the Casa Grande as well as the cuts and fills necessary to acquire the desired grades within the compound.

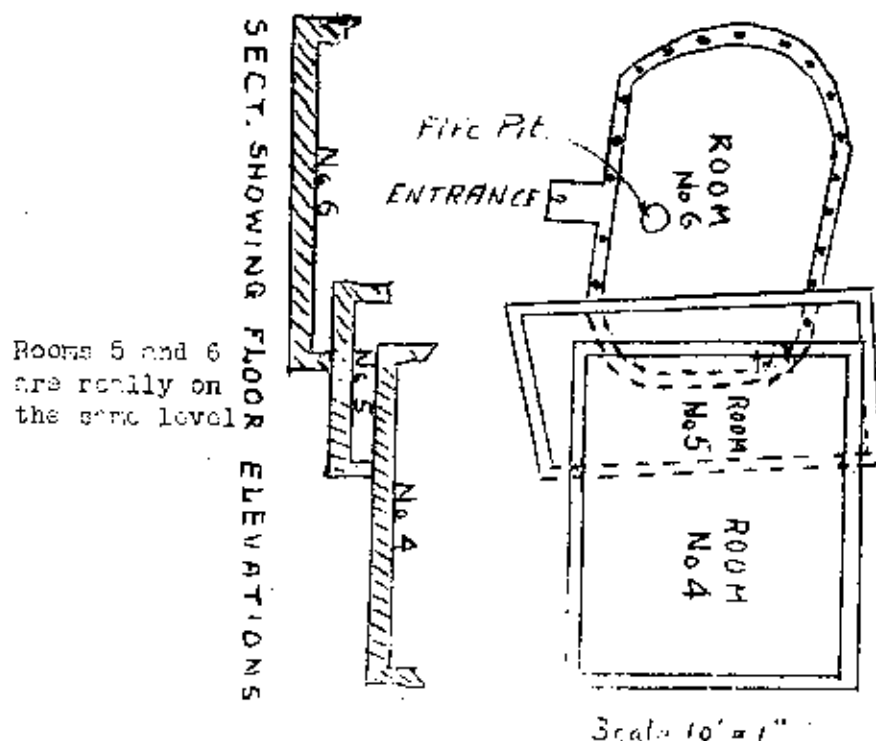
"The map showing the buildings and utilities has been completed as far as the survey has been made. All maps are being drawn on a scale of 10' equals 1"

Respectfully,
C. F. Ellis."

SECOND PRELIMINARY REPORT ON EXCAVATIONS AT CASA GRANDE, 1934. Mr. Russell Hastings, Archaeologist.

"The architectural types.

"The fourteen rooms opened to date seem to represent three types of rooms used as dwellings and a fourth type possibly un-roofed, which was probably an outside kitchen or workshop area. The sequence of dwelling types is clearly shown by two separate cases of superposition each of which contains dwellings of all three types. Some details of these rooms are not as clear as they might be however, as in both cases of superposition, part of the floor of



the early room was re-used for a later room and the resulting confusion has resulted in obliterating part of the record. The accompanying sketch plan and section will give an idea of the situation and show the relative position of the floors and walls. Room 5 is the earliest and room 4 is the latest.

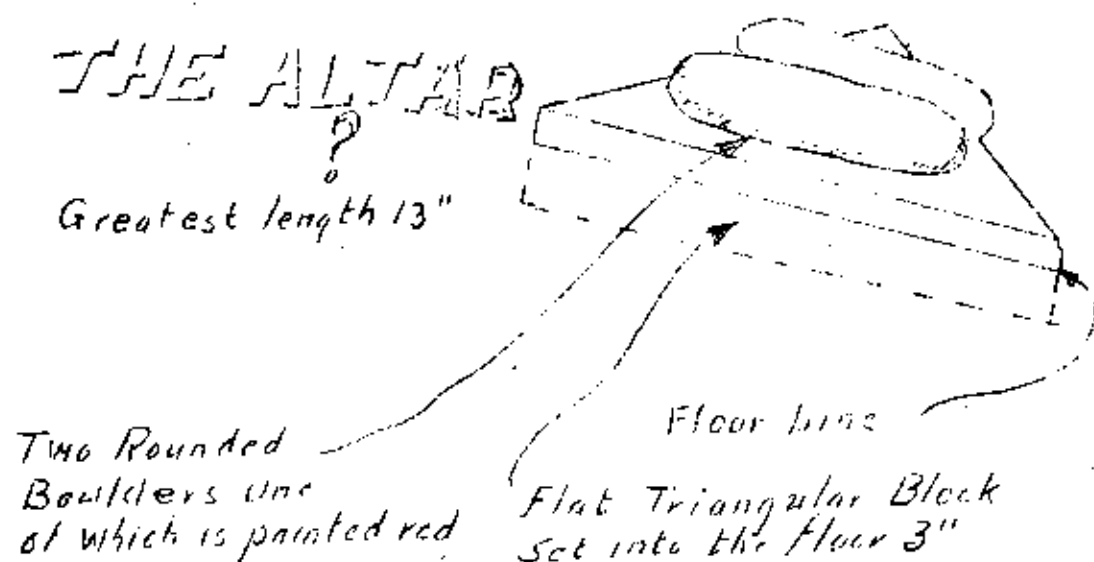
"It will be noted that the floor of Room 6 is on the same level as that of Room 5, and that a part of the same floor was used in both rooms. Most of the eastern wall of Room 5 was cut away when room 6 was built, so I cannot say whether there was a vestibule entrance in Room 5 or not. A similar situation was found to be the case with Rooms 8, 9, and 10 where Room 9 was the earlier and more than half of one side was cut away when Room 8 was built.

"The early type - Average dimensions 12 by 15 feet. The floor is rectangular with rounded corners. A fire pit is located near the center of the long side and about two feet from the wall. The presence

of an entrance way here is likely, though for the reasons mentioned above, none was discovered. The walls are of adobe plastered against reeds or small branches which are supported by posts at intervals of 24 to 30 inches. They are pit-houses, the original depth being approximately 9 inches. In plan they closely resemble the houses described by Hurry at Roosevelt 9:6 except that the posts are at the edge or just outside the limits of the floor.

"The Second Type" - Average dimensions 10 by 15 feet. The long sides are straight but the ends are almost a perfect half circle. A vestibule entrance way similar to those at Roosevelt 9:6 is present and the fire pit in the floor immediately in front of the entrance. Walls were the same as in the preceding type.

"The Third Type." - Average dimensions 13 by 17 feet. The rooms are rectangular and the corners are square. None of these rooms have as yet revealed a fire pit or entrance way. The walls are solid caliche with an average thickness of not over 12 inches, though individual walls may exceed 14 inches. No openings have yet been discovered, yet many of the walls are less than a foot in height and it is possible that doors may have been above this level. Two specialized floor features have been found associated with this house type but their identification is uncertain. The one is a slightly raised hearth (?) and the second, an 'altar' (?). The 'altar' occurs in a room whose floor ~~level~~ is 26 inches below ground level and is the deepest room yet discovered. None of the rooms excavated so far were built contiguous to one another and no compound walls have been found, but a section is now being opened which may show both these features.



MR. ATTWELLS REPORT.

"After spending four days at home after a ten month's absence, I again returned to the field for another session.

"During the month of January I visited Bandelier three times, Casa Grande five times, Capulin once, Chiricahua once, Gran Quivira four times, Montezuma Castle and Tuzigoot each twice and White Sands three times, regarding C.I.M. projects and C.O.Q. camp. I also stopped one night at Petrified Forest while en route. The last two days of the month were spent on the proposed C.I.M. projects for the period starting February 15th.

"My activities were mostly in organizing crews, selecting foremen and laying out the work. After this had been accomplished and the correct number of men had been employed and the schedules for 'Other than labor' had been figured so that team and truck hire and materials would just balance, the schedules were upset by orders to cut labor to 50% and Other Than Labor out to nothing. It was then necessary to reorganize the entire set-up.

"The re-arrangement would not have been so serious if it were all within one park, but here it is spread out over several states and the mode of transportation is a discarded prohibition Ford. That made long distances in remote sections and bad country an inconvenience. An example of this is when I left Capulin at noon for White Sands the next morning, a distance of 473 miles. At about 8 p.m. the car lights went out and I had to wait several hours for the moon to come up so I could get to civilization. Anyway, I arrived on time, helped in the road location, looked over the survey and construction, had the lights thoroughly overhauled and left at 7 p.m. for Casa Grande, a distance of 425 miles. After travelling 18 miles the lights went out on the N.R.A. schedule and I was left without lights or moon. It was necessary to follow a truck over fifty miles to the first garage. I finally got re-lighted in Las Cruces and arrived at Casa Grande at 11 o'clock the following morning. I don't blame the prohibition service for going out of business when they had to operate this car.

"At Montezuma Castle the main work consisted of repaving the entrance road by raising bad curves and grades, widening the road bed and sloping the banks. A man is removing the temporary road curb at the parking area and replacing it with permanent rubble masonry. This is similar construction to the completed walls there of last years Public Works. A small crew has delivered suitable building stone for the new garage and equipment shed. The service road has been cleared and grubbed from the entrance road to the camp grounds. By the curtailment of activities the much needed pavement work must wait for additional allotments. The fencing and the trails to the ruins are also on the waiting list. The engineering crew located and cross sectioned the entrance road, the service road, staked the pavement work and made a reconnaissance of the irrigation ditch.

"While at Montezuma Castle I stole an hour on New Years Day to help Mr. Bill Back, of Montezuma Well, open a burial vault. The find included the skeletons of a man and a woman with pots and vases but no jewelry. Near the woman's skeleton were found three arrow heads. Her skull had the sharp cut wounds in it which no doubt were made with some sharp instrument, possibly the arrows.

"The work at Bandelier shows value received for every man day's work delivered but also shows damage to equipment and life. Three accidents have resulted in three lives lost. Two were lost when a load of culver pipe turned over with a truck driven by a C.C.C. boy. The third occurred when a plow shaker was struck by a plow handle while sacrificing. The Bandelier project is a big one, using over 300 men with heavy equipment. Most of the men employed are un-experienced boys from the C.C.C. camp at the reckless age of 18 to 22 years.

"The work accomplished shows the entrance road well under way. The new water system is complete except for the intake. This was a large project as over 2,000 cubic yards of material had to be hand excavated and then backfilled. The trails up and down the Canyon have shaped up nicely and will add materially to the comfort of tourists going up to the Ceremonial Cave or down to the river.

"At Capulin road progress has been shown in the road work. Sharp curves have been eliminated by excavation of the blind points and placing the material in the fills. The road is already much safer, even during construction than it ever has been before. The cut in the program will eliminate the parking area at the rim of the crater and construction of the Rim Trail and the Crater Trail. The engineers have taken topography for the new parking area, located the road and trails, made reconnaissance of the water and are now staking the Monument boundaries.

"The peaceful slumbers of Gran Quivira were disturbed for the first time in a century when a grading crew on the entrance road started operations. The sandy location of the entrance road is being planted with cilia. The sharp curve at the Mission has been flattened. The steeper sections of the grade have been eliminated. The deep arroyos near the entrance have been filled with stone and sand. A lot has been accomplished.

"The cut in the program will prevent the completion of the road and will eliminate the entire parking area and all of the trails. It probably was this cut in program which got Mr. Smith down and nearly out. He took to his bed and called the doctor for pneumonia about 20 minutes after the cut went into effect. When I arrived he was so weak that he was hardly worth feeding, but rallied enough to whisper: 'I forgot to ask for an elevator to open up 800 or a thousand feet of the building wall behind the Mission. Be sure to have the Boss put it in. Tell him I don't want to open up much of the village but would like to have a quarter of a mile of it showing.'

"The road work at White Sands kept up with the approved plans. I made three trips there to supervise the road location and surveys and re-arrange the Other Than Error schedule. The error in the State road map showing suitable plotting materials tested and approved, inconvenienced our program. This test of material within a few hundred yards had proved entirely unsatisfactory. We were obliged to re-arrange our program and haul from the next nearest pit eight miles further away. We have completed the water survey and the exploration survey. The road bed has been graded the entire distance, eight miles. Plotting has been placed on nearly one mile but the cut in program of the 19th fall entirely on the plotting. At the end of this period on February 15, our road will resemble a new modern house, complete except for the roof.

"The crew at Tupacacogí is exceptionally adapted for adobe work. Most of them have been raised with it. The adobe walls around the Mission, requiring thousands of adobe bricks, are well under way. This project was lucky in obligating its materials at the start. When the project closes the walls will be nearing completion and the plazas will be drained.

"I was sent to make a report of the C.N.M. program for Chiricahua National Monument. After contacting the Forest Service Officials, who used to be the parents of this Monument, I made a two days inspection trip on the ground. The scenic and geologic value of the Monument impressed me far beyond my expectations and that is hard to do after seeing so many of our spectacular places. One pleasing factor was that the Monument is so easily accessible on foot or horse. The walking distance to a car from any of these thousand different vantage points such that anyone may make the trip with ease.

"Some of the most interesting features to see were the numerous balancing rocks, many of only four cuberit with only two foot bases supporting them; one had only an eight inch base. There were thousands of totoposteos, and 160 foot high resting on a 2' by 4' base. There were painted caves, mounds of prehistoric ruins and pillars. No Folsom points have yet been found, Mr. Farr.

"The Monument consists of a series of fields of large rhyolitic monoliths eroded into very fantastic shapes. The rock is cut by deep walled canyons, some of the walls being about 200 feet in height. Against the deep blue of the sky a picture is made which could be difficult to transfer to canvas not only on account of the million cracks, crevices and irregular forms of the rocks themselves, but also because of the many varying hues and gradations of color.

"After a strenuous month on the road with several thousand miles out of the old Ford, I settled down on the 30th for a siege at proposed C.N.M. projects on 26 national monuments for both General and Historical programs.

Walter C. Kittell,
Engineer-in-Charge.

IN CONCLUSION.

I think you will agree with me, Chief, that this report is too long; yet we have turned out a lot of work this last month and are mighty interested in telling you about it. I might have cut these reports down a little and saved space, but this is our only chance to get a lot of stuff into the record to which we might want to refer in the future, so I hesitate to cut a long report for fear I might cut out something which might become important in future years.

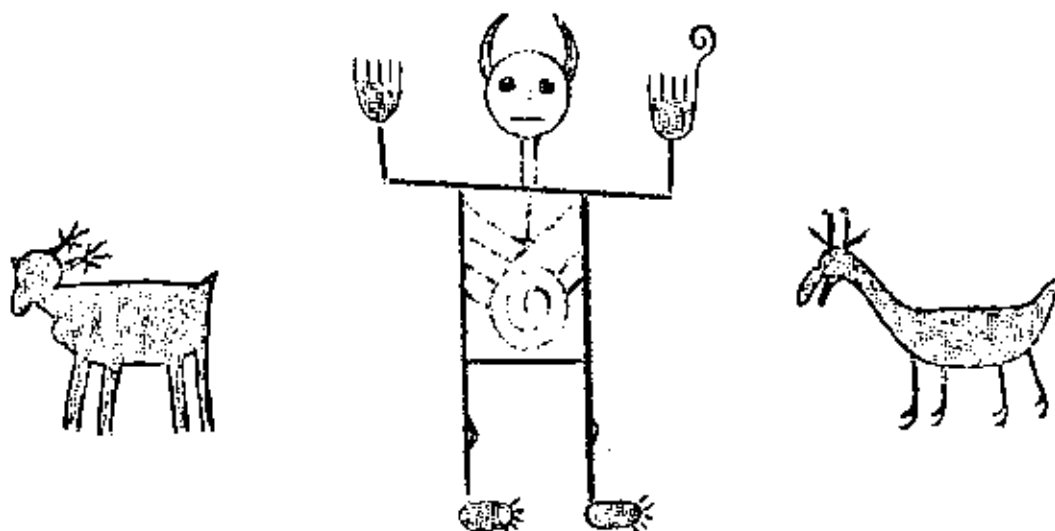
My own theory is that except for record purposes, a monthly report decreases in value every day after the end of the month which it covers. We of course get the bound copies of all the Superintendents reports; the reports for September arrived here the first of February and they are so dead that we felt like dipping the flag and receiving them with military honors. This is why we try to get this report to you as soon after the conclusion of the month as possible. We are perfectly aware that in getting speed we are sacrificing quality of finish and inaccuracies and errors will get in along with the news, but I still think that it is worth while if it gives you the general cross section of the southeast monuments and the feeling of the men who are running them while the events narrated are still fresh.

The big blow that struck us during January was the curtailment of our program. Unlike the State and Local C.M.A. projects, we started out with a set-up of money for men and materials; we knew just where we stood and outlined our work accordingly; then in the middle of things, while we still had balances on the books which would have allowed us to carry our projects through, our 'Other Than Labor' funds were held up and finally released to us in dribbling amounts which has sadly hampered our efficiency. This was all through no fault of ours as we were operating within the limits we started with, and could have completed the majority of our jobs as we had then outlined if we had been allowed to spend our funds as we had set them up. As things stand, we are going to have some incomplete projects on February 15, because some of them cannot be tapered off; they must either be finished or left in the air. We trust that these will be continued under the extended program of C.M.A.

Cordially,

Frank Pickley
Superintendent.

UNITED STATES
DEPARTMENT OF THE INTERIOR
Office of National Parks, Buildings and Reservations



PETRIFIED FOREST NATIONAL MONUMENT
Holbrook, Arizona

February 1, 1934

The Director,
Office of National Parks,
Buildings and Reservations,
Washington, D. C.

Dear Mr. Director:

The time for submitting another monthly report has rolled around again in what seems to be a remarkably short period, so the report of activities in the Petrified Forest National Monument for the month of January, 1934, is respectfully submitted.

GENERAL:

The most important activity in this monument is still the Civil Works Administration. Work has been started on each of the jobs authorized in this monument, including the archaeological reconnaissance, with the exception of No. 7, which was the extension of Second Forest Trail; No. 9, which was to gravel First Forest road; and No. 13, which was to provide bank protection for the Rio Puerco. Work was proceeding on all the other jobs at good speed and men and equipment had been scheduled in the expectation of rushing most of them through to completion by February 15. On January 18 and 19 we received telegrams and messages from officials

of the State and County Civil Works Administration which indicated that a drastic reduction in the hours of Civil Works employees had been made, effective immediately, and that no supplies or materials, including the rental of trucks, could be made. This hampered our whole program greatly and resulted in a total shut-down of all C. W. A. activities on Tuesday, January 23d until more information should become available. On that day I attended a conference of state and county executives of the Civil Works Administration and in attendance were representatives from the five northern counties, Grand Canyon, Petrified Forest, Navajo National Monument, and others. After the general meeting was over I had a conference with Miss F. M. Warner, who is the State Civil Works Administrator, and the situation was clarified to some extent. She gave me authority to employ men who had been working in the monument from Winslow, Arizona, 24 hours per week; men who had been actually in camp and shown as such were allowed to work thirty hours per week; and all others only 15 hours per week. This made a very complicated situation as I had previously employed a number of men in camp but had not shown them as in camp at forty hours weekly because they had been working thirty hours per week in crews of men who were going back and forth from Holbrook, Woodruff, and other towns. The greatest hardship is on the men who had been working thirty hours per week, for it will be a great hardship for those who live in nearby towns, as they must travel from 17 to 20 miles each way daily. By the same token men cannot afford to live in camp, providing their own facilities, for \$7.50 weekly wage. This will result in a great dropping off in the number of workers and whether they can be replaced or not, I cannot say. It will not now, of course, be possible to finish our program by February 15. A brief resume of the jobs under way or completed in this monument follows:

Job No. 1, Cleaning ditches and banks of the monument highways. Practically complete.

Jobs Nos. 2 and 3, Headquarters area landscaping and headquarters area campground development. About 25% complete.

Job No. 4, One mile road from headquarters to pictographs. Line has been surveyed and staked, but no work done.

Job No. 5, Headquarters 1/2 mile trail to ruins. About 50% complete.

Job No. 6, Completion of footpath in Third Forest, installing stone steps on Panorama Knoll, and extending of footpath to Agate House. This has all been completed and is a very fine job, particularly the stone steps to the top of Panorama Knoll will be a fine thing for the tourists for many years to come.

Job No. 8, Completion of the First Forest road to Eagles Nest Rock. Practically finished as to grading, the culverts

are in place, but no surfacing has been done and nothing has been done on the construction of headwalls for these culverts. This job will probably have to be left in an unfinished condition.

Job No. 10, Side road to Newspaper Rock. Nothing has been done except locate the road.

Job No. 11, Blue Forest Road. Nothing has been done except locate the road and a little preparatory work.

Job No. 12, Blue Forest Trail. About 75% complete.

Job No. 14, Drift fence around forty square miles of monument, requiring about 31 miles of fencing. About 70% complete. Due to the prohibition against hiring trucks and purchase of gasoline we have about 4,000 cedar posts still in the woods on the Navajo Reservation, about sixty miles from our headquarters, which were cut by Navajo Indians. These posts are worth at least 30¢ each where they are and it is hoped that the prohibition on the purchase of gasoline and hiring trucks will be lifted so we can at least get these posts in. By concentrating all workers possible on this project and staggering shifts, it may still be possible to complete this fencing by February 15.

The following brief report on the archaeological activities is given to us by Mr. C. B. Cosgrove, Jr., who is in charge of this work under Dr. H. P. Mera:

"The Agate House has been completely outlined showing that there were eight rooms in the building. Two of these rooms were evidently later rooms due to the fact that a later wall had been built over earlier walls. One room is being completely restored and roofed over. An opening has been left in the side of the wall to allow people to look in, but not enter the building. This will prevent vandalism, as we are leaving the fireplace, metates, bins, etc., in place as they were found. At present we are working on the roof construction. The walls of the remaining rooms are built up a couple of feet and have been left uneven on top to give the effect of fallen walls.

"A thorough survey of the monument is being made to locate and map new ruins. A complete sherd collection is made at each site. These sherds are sent to the Laboratory of Anthropology at Santa Fe, N. M., for study, the information gathered from them to be included in the final report of the project. The survey in the southern section of the monument is practically complete. To date seventy-six new sites have been located, ranging in size from small one-room houses up to larger houses of thirty or forty rooms."

WEATHER:

The weather conditions in this monument have continued ideal with the same fine warm days and cool nights that we had through December. The contrast between this winter and the same season a year ago shows that where sub-zero temperatures, in some cases 10 or more below zero, was the rule last year, this year the weather has been like fine autumn or spring weather all the time. A table of the weather statistics follows:

High temperature for the month was 65 degrees on the 23d; low was 9 degrees above zero on the 8th. Mean maximum was 48.5 degrees, mean minimum 19.7 degrees. Precipitation for the month totaled .11 of an inch. There were 25 clear days, 4 partly cloudy, and 2 cloudy days.

ADMINISTRATIVE:

Our office work has been kept fairly well up to date in spite of the fact that much of the Civil Works Administration voucher, payroll, and other work has had to be done several times on account of faulty or incomplete instructions as to the method to be followed in some cases. It has been particularly hard to get vouchers through for the purchase of materials, but all of our obligations have now been vouchered in what we believe is the required C. W. A. form and have been placed in line for payment.

As stated above, we have been seriously handicapped in this monument by the shut-down on the purchase of materials, which has particularly hampered our truck activities. I was allowed \$80.00 for the week ending January 25 from the small funds which had been allotted to Navajo and Apache Counties, Navajo allowing us \$60.00 and Apache \$20.00. On January 28 I was notified by Mr. Lloyd C. Henning, Chairman of the Navajo County Board, that he had another fund available for the present week, and then on taking the matter up with Mr. Henning he stated that he would be willing to let me have as much as could be spared by Navajo County, but before he would commit himself he insisted that I should see the Apache County people and find out how much they could let us have. This made it necessary for me to go to St. Johns, the county seat of Apache, a round trip of nearly 100 miles, and I succeeded in obtaining \$100 from them. I had figured our necessities at about \$500, but was compelled to accept the \$100 from Apache County, and with \$200 from Navajo County we will have \$300 this week for materials. I am not criticizing the county officials in the least, but this is a very unsatisfactory way to handle the C.W.A. program, namely, on a week to week basis.

The monument has been periodically inspected by the superintendent and things have been going in fairly good shape. Asst. Engineer C. M. Bell, of course, has been in direct charge of the actual work, and Mr. H. J. Cremer has been in charge of the landscape work around headquarters. The campground project is well

under way with the grading 100% complete, drive and parking areas are laid out, and the finishing wearing surface of coarse sand is being laid at present.

All approach roads to the monument are in good shape and the grading and surfacing of U. S. Highway 66 east of the monument is being pushed rapidly.

PUBLIC WORKS PROJECTS:

The only Public Works project under way by force account is water and sewer development. Under this project we are continuing the water well at headquarters and have not made any progress during the month. At the close of last month I stated that we had pulled the string of 5-1/16" casing and were going to effect a shut-off in the Coconino sandstone and continue drilling. We did not succeed in effecting a shut-off, and in pulling the casing after it was raised about twenty feet it became frozen and we have not been able to lift it any farther. In an attempt to pull the casing a spear was run down in the hole and engaged the bottom joint of the casing, but with all the jarring on this spear and as much strain as was advisable to put on the casing with hydraulic jacks, the pipe could not be budged. Then an attempt was made to blast off the bottom of the shoe with dynamite. In the meantime the Indian Service needed the hydraulic jacks which we had borrowed from them, and we are now getting these jacks again to see if we can pull the casing and run the hole down in the hope of getting a better seat for the casing and effecting a shut-off.

Work was continued on the dug well at Indian Ruins at the site which was selected by Mr. Vint and Mr. Hommon, and after sinking this hole to a depth of forty feet (about 12 inches below the river bed) without success, operations have been abandoned at that spot.

Invitations for bids on five checking stations, for which \$4500 was authorized, were sent out and bids were opened January 22d. There were only two bids received and they were, respectively, \$6,594 and \$7,394. As the lowest bid was \$1,094 more than the amount available, all bids were rejected. Other contractors had intended to bid but they told me there was no hope of their being able to bid within the amount available. I have communicated with the Branch of Plans and Design at San Francisco as to their recommendations in this matter, and when I hear from them I will make proper representations to you.

LABOR SITUATION:

The labor situation was much improved in this locality, but there are still a great many persons unemployed in the nearby counties and we may possibly secure replacements of our Civil Workers on account of that fact.

BUREAU OF PUBLIC ROADS:

Construction work on the overpass at the A. T. & S. F. Railroad north of the Rio Puerco has been shut down all through the month and that project will not be started again until danger of severe frost is over. Of the seven bridges over dips which are under construction, the four on that part of the road north and south through the monument are completed, and work is progressing on the three on U. S. Highway 260. Everly and Allison started work on their grading contract the first week in January and are proceeding in their usual efficient manner. They have raised the grade on a mile of road in the Blue Forest area and have graded approaches to the three northerly bridges over Dry Creek on the Petrified Forest highway.

MAPS AND SURVEYS:

I understand there has been a topographical survey under way through the monument and adjacent areas, but I have seen very little of the men engaged in this work and cannot say as to how far it has progressed.

I believe the B. P. R. have the survey now completed on the Painted Desert rim road, ready for submitting to their San Francisco office.

RANGER AND MUSEUM SERVICE:

Good service has been given to the traveling public by the rangers and the monument has been fairly well protected, in spite of the fact that we have about half as many men for that purpose as should be authorized.

ANIMALS:

Small bands of antelope continue to be seen, both east and west, and in some cases within the monument, but not as much small game is seen this year as usual. The rabbits and rock squirrels were practically exterminated last winter, the weather being so severe that a great majority of them froze in their dens.

TRAVEL:

On account of the gradual business recovery through the country and the fine local weather, our travel continues in excess of last year. The travel increase this month over the corresponding month of last year is 3,994, or 93%.

For the month, Petrified Forest section, cars,	1,298	people	3,993
Previously reported	" 6,440	" 16,264	
Total to date	" 7,738	" 20,257	

For the month, Painted Desert section . .	cars 1,121	people 4,295
Previously reported	" 7,586	" 28,154
Total to date	" 8,707	" 32,449
Grand total for the month	" 2,419	" 8,238
Grand total to date	" 16,445	" 52,706
Grand total same month last year . . .	" 1,270	" 4,294

SPECIAL VISITORS:

On January 1 the Federation of Federal Employees Union, Hob-
 brook Local No. 423, held their annual meeting in the office of
 Superintendent Chas. J. Smith, and he was elected President.
 Messrs. R. J. Coleman and T. R. Neiswander from the State Land
 Office in Phoenix were business visitors in the monument on Janu-
 ary 3. Messrs. Clarence Leavitt, V. F. Darrow, and Wm. James,
 B. P. R. employees, arrived on January 3 to assist in road con-
 struction through the monument. Mr. Chuck Richey, Assistant
 Landscape Engineer, accompanied by Mrs. Richey, visited the monu-
 ment on January 6, while enroute to Bandelier National Monument.
 Mr. W. R. F. Wallace, B. P. R. engineer, was here on official
 business January 16. Associate Engineer W. G. Atwell of the
 National Park Service, was here January 27.

ACCIDENTS, C. W. A.:

So far we have had only three accidents to C. W. A. workers
 in this monument and they were all minor ones. One was an in-
 jured foot caused by the employee striking himself in the foot
 with a pick, which laid him up for a few days; another was an in-
 jured foot caused by a falling rock while the worker was engaged
 in loading rocks on a truck; and another worker sustained a
 bruised thumb which was struck by a hammer while he was engaged
 in drilling rock. Only two of these men were obliged to quit
 work, the one with the injured thumb not leaving his job.

MISCELLANEOUS:

I received word from Dan Kee that our dear friend, Mrs.
 Stella M. Leviston, passed away on January 22, 1934, and the
 funeral service was at two o'clock Wednesday afternoon, January
 24. Mrs. Leviston had reached the age of 85 years on January 9.
 Although we had known for some time that she was in failing
 health and on her last visit here a year ago last fall she had
 stated that she wanted to get as much out of the trip as possible
 because she knew it was her last, we had hoped that possibly she
 might get around once more. The Service has lost a dear friend
 and to those of us who knew her, her passing comes as a distinct
 personal loss.

Very truly yours,

Chas. J. Smith
 Chas. J. Smith,
 Superintendent.

SUPPLEMENT TO THE
JANUARY MONTHLY REPORT
OF
THE SOUTHWESTERN MONUMENTS

Dealing with shop talk, folks, and things.

MORE ABOUT TUNNELS.

The following letter from the Chief Architect is of enough general importance to be quoted in this report. We have had our say about tunnels and handling visitors through cliff-dwellings and it is only fair to give Tom an equal opportunity.

"Memorandum to the Director:

"Attached is a blue print sketch plan showing Mr. Pinkley's proposal of a tunnel arrangement to reach Montezuma Castle. The Castle is now reached by a trail and a system of ladders, and visitors are allowed to go through practically every room in the building. This practice has threatened the life of the building as there is a certain amount of vibration every time a few people walk through it.

"Mr. Pinkley's idea is to handle the traffic something like it is handled at Mount Vernon, where one stands in the hallway and views a room through the doorway. His idea, applied to Montezuma Castle is to enter through a tunnel into the cliff and reach the rooms from the rear. The sketch attached shows approximately the amount of tunnel and stairway that would be required.

"I have always been opposed to the tunnel idea because I feel that it is an artificial way to reach the Castle. Frank Pinkley has written you a number of times about it and has said that: 'Tom Vint wouldn't like it even if it was good'. That does about express my viewpoint of the tunnel idea. For a time I felt that we were taking a certain amount of risk to construct the tunnel as the actual construction of the tunnel might threaten the Castle. However, Mr. Attwell's report, of the Engineering Division, indicates that they feel that the tunnel can be dug without any danger to the Castle. The only precaution necessary is a very careful control of the blasting.

"My suggestion for handling the traffic is along the general lines that it is now handled, except that I would make a longer trail and one that would allow visitors to come on on the ledge at the top of the bottom ladder. This would eliminate one of the existing ladders. This ledge that I speak of is the one the Indians used when the Castle was occupied. The route that I have just described is shown on the Montezuma Castle Master Plan.

"Mr. Rose, the Naturalist of the Southwestern Monuments, proposed the schema of giving the lecture of the Montezuma Castle at the foot of the cliff in what has recently been used as a parking area.

When the parking area was built last year it was located some 800 feet back from the foot of the present trail which was the location of the old parking area. Mr. Rose proposes that we build a small amphitheater where the lecture can be given and make some models to illustrate the sections of the Castle, and its different periods of construction. These could be very nicely shown by models, and without doubt would give the listener a clearer picture of the entire structure than he could get by going through the building. It is contemplated, by the said means of the lecture, that a number of people would refrain from making the trip through the Castle. The traffic through it would be reduced by that much, and those who would go through would not need to be there so long as the lecture would be given at the foot of the cliff.

"This preliminary sketch has come to us for landscape approval. The above gives my opinion of the scheme it represents and I could appreciate you reviewing it and giving your ideas of the policy involved.

"My recommendation is against the use of a system of tunnels to reach the Montezuma Castle."

Thos. C. Vint,
Chief Architect."

There is one fine thing about this report, Chief; you know where Tom stands when you get through reading it.

"Your December report was really thrilling and inspiring. As I read it the other night (and such of it I read aloud to Mrs. Albright) I could visualize the Southwestern Monuments as hives of industry with fine results being achieved under the C.M.N. and P.W.M. funds allotted to you. The spirit of your staff of aids and monument superintendents is a marvelous thing. Once more I say I am proud of all and again I congratulate you." From former Director, Albright.

In the matter of repetition and duplication in Southwestern Monument exhibits, which has been argued back and forth in this Supplement, I want to quote from a memorandum of Mr. Schellbach, dated January 16:

"The usual procedure in handling visitors in the Southwestern Monuments is to collect them in a room until there are sufficient numbers for a guide to conduct them to the ruins. This room is, of course, an assembly room, and in a way takes the place of the museum, in which the story of the ruins is told in detail and illustrated by the specimens secured from the ruins. This assembly room should act and function as an introduction to the story of the ruins and gateway to them.

"The introduction, then, would consist briefly in orienting the visitor on the archaeology of the area and to set him right as to where this particular ruin fits into the scheme. This excites interest in the visitor who wants to know and to be oriented further and asks the stock questions of, 'Where did the Indians come from?' 'Why? I thought

all Indians were the same.' 'He is you know?', etc.

"Most of these questions can be answered by the guide, but certain questions can be answered best and briefly by a graphic chart. The guide can point to a chart and say, "This shows where the American Indian came from." At a glance the visitor gets the picture and answer without a lecture.

"Certain charts will, of course, be necessary in orienting the visitor at any of our archaeological parks or monuments. This will make for duplication, but a necessary duplication. This duplication will in no way interfere with the main story of the park or monument. Nor will it attempt to go into detail so as to duplicate the entire archaeological story of the southwest or interfere with the whole story of Southwestern archaeology as told at Mesa Verde National Park.

"For this orienting of the visitor a chart showing the supposed migration routes taken by the people crossing Behring Straits into America, a chart showing the chronological order of the prehistoric cultures of the Southwest, with the particular monument in which it is placed emphasized, and another chart showing the method of tree-ring dating and the dating of the ruin in which this exhibit is placed, would seem necessary. These charts would constitute really the sum of duplication gone into in the Southwest. Here and there there would be a duplication, as, for instance, the showing of costumes of the Basketmaker or Pueblo, or the method of working stone, or the food plants used by the ancient peoples of the region. However, duplication in this respect would be worked out to tell the story in different ways.

"Linguistic charts deal with ethnology and are of such a technical nature that the average person is not interested. Nor should we attempt to enter the field of the university."

Which puts the situation with which we are dealing before you very plainly. And we might also here to remark that we are somewhat amused at the idea that we are not to tell the whole story of Southwestern Archaeology at any place except Mesa Verde. Why in the world should Mesa Verde, with its meager 18,000 visitors per year be given a copyright on the whole story of southwestern archaeology? From a pure publicity angle; the angle of reaching the most people with your story and hitting them hardest, Mesa Verde isn't by any means the head of your list. This is no plain to us and has been for some years that we are surprised that there is anyone in the Service who doesn't realize it.

Here is a cross section of what happens in camp; a report from John Wetherill which reached us the day after we finished the first section of this report. John and Irwin Hayden were down here at headquarters for a couple of hours one day during the month and

we were all trying totalk at once for the all too short time they were here.

"Dear Frank:

"Mr. Hargrave of the Wupatski National Monument visited our camp last week. Mr. Hayden, Mr. Coston and I had to go to Ash Fork to attend a meeting of the clerks and officials of the C.M.A. From Ash Fork, we being so close to Coolidge, a matter of only a couple of hundred miles, we decided to visit our Superintendent. We found him on the jump trying to keep up with the changes in the rules and regulations of the C.M.A. as fast as they came out from Washington. Washington was about two jumps ahead the day we were there.

"Upon our return we had some bad news. One of the packers had just left the Marsh Pass Camp to carry a message to Mr. Hain at the Turkey Cave Camp, informing him of the death of his wife which occurred the night before in Winslow.

"Mr. Hargrave was at the Marsh Pass Camp and he took us on to Kayenta in his Coupe. Mr. Hayden, Mr. Coston and myself along with Mr. Hargrave made quite a load for the car. Mr. Hayden had to ride on the spare tire in the rear, as his size would not allow for three men in the front seat, if he was one of them. We all arrived at Kayenta in good shape, except Mr. Hayden, who will have no use for the rear end of a Ford car in the future.

"About nine o'clock Mr. Young and Mr. Nevins brought Mr. Hain in and he and Mr. Hargrave left for Flagstaff within a few minutes. Mr. Hain expects to be back in a few days.

"After arriving at Turkey Cave Camp Friday morning we found one of the men sick. We doctored him up for the night and he seemed better the next morning but about noon he became so bad that I thought it best for him to get to a doctor. Mr. Coston left camp with him about three o'clock and took him on to Kayenta. Our hospital doctor was not there so he left him in charge of the head nurse. Sunday morning Preston Coston took him on to Flagstaff and gave him money to get to his home in Snowflake.

"Sunday, one of the men who had been shot up during the war wanted to take a horseback ride. Monday his old wounds pained him so much he had to stay in bed all day. Tuesday he was on the job again in good shape.

"I seem to be writing of nothing but our bad luck. I think our hard luck was caused by the action of the C. M. A. in cutting to 15 hours. It helped some when they raised the men back to 30 hours.

"The men working on the trail are making quite a showing. Mr. Hayden, our Geologist, is very enthusiastic over his work. He is a careful worker, and what he does will be done right. We have to haul all the mud used in repairing ruins up on poles, it is a 55 foot pull. The water is packed on a mule for 300 yards. Even with all this they are getting along fine. There is so much to be done, that we will not make a large showing by the 15th of February.

"I want to thank you for getting my 'Other than Labor' funds raised.

"January 30th. A heavy wind started up last night. It is still going and is not still ~~anywhere~~ either. The old tents are popping, cracking, snapping and jumping and the men on the trail are working in a heavy dust.

"Mr. Henning has let us know by 'phone that our 'Other than Labor' fund has been raised to \$150 per week. I have had to send two men out to Flagstaff. One of them had pneumonia. What show will I have to get pay for the cars that took them in? We cannot get bids on a thing of this kind and have to take what comes along. The men of course have no money to pay with.

Yours truly,
John Wetherill."

John doesn't bring out the fact that this man with pneumonia had to ride eleven miles horse back down to Marsh Pass and 160 miles in an automobile and 100 miles by train and 25 ~~more~~ more miles in an automobile to get home. You see, he lived down in the other part of the county. And you will also see how funny it is to us when we relay instructions from the C.W.A. in Washington to the men in the field to 'keep in constant touch with your County Administrator' and so on.

Here for instance, this being Monday, we get word this morning that John can have so many dollars of his 'Other than Labor' money to hire pack stock etc. but these dollars must all be obligated or expended by next Thursday night. All we have to do is to telegraph to Flagstaff and have it telephoned to Kayenta and taken up twelve miles in an auto to Marsh Pass and eleven more miles by saddle up the Tsigie to John; and all he has to do is spend the money by Thursday night, and then, theoretically we all sit around and wait until next Monday to find out how much of our money we are going to get to spend by Thursday of that week. Practically of course, John can't shut down the pack and saddle stock and has to go it blind from Thursday to Monday wondering if his money will cover the expense.

Here is another little view into that camp up in Turkey Cave: it is a letter from Irvin Hayden:

"Dear Frank:

It was about three p.m., Saturday, January 20. We were at work clearing up a section of Keet Seel when we saw a lone rider coming up the trail. We took him for Mike Movins, one of the packers and a darned good man; he helps Bill Young with the pack train.

"We wondered why Mike was riding alone into camp. Soon we found out. Hosteen John (John Wetherill, our Superintendent), sent a man up to call us in. He had letters from Kayenta telling of a telephone message received in the morning from Holbrook. Poor service that day made it impossible to get the message as sent; what we got was a vague, alarming report that C.W.A. hours were cut to 15 per week with cuts in pay for Superintendents and foremen. The message contained orders for Mr. Wetherill and his clerk to report to Ash Fork on the 23rd.

"Hosteen John put it up to his crowd: 'What do you want to do, men? It looks as though we were through, but maybe not.' To them, the outfit stuck: 'We'll stick, hours or no hours, pay or no pay, until you get back from Ash Fork.' Bill Young, head packer, said he would stay by John Wetherill to the end. Josh Young, another valued member of the party, said he would stay with John Wetherill even though a certain place notoriously hot might become completely solidified in by ice! At least that is the gist of what he said.

"We have a group of men from Navajo County which will stack up with any C.W.A. crew, anywhere, in our opinion. They are willing workers and interested in the project. In spite of the five hour day, morale is good. A good violin, skillfully played by two of our men, helps mightily in the evenings.

"We are here in Teague Canyon, some 12 miles from Marsh Pass. If we get beaucoup snow, we shall be thankful for John Wetherill. That veteran of the Navajo Country can bring us through anything that may show up by way of weather.

"Speaking of weather, we have so far enjoyed mild, clear, days and nights cold enough to freeze the water in the buckets.

"Oh Yes! When Hosteen John returned with news of the 30 hour week we all said: "Well, we knew John Wetherill would take care of us!"

Irwin Hayden,

Archaeologist, Project 6."

There is a lot of other stuff that could go into this Supplement but this whole report is about to get away from us, so we will save some back for next month. Incidentally, we have issued so many instructions and directions to the boys on the firing line that our supply of plain paper is exhausted and we had to go over to the print shop and buy this with our own good money, which accounts for the cheapness of the quality and those lot chuckles of the Custodians who will feel that it serves us right for being so liberal with those instructions. You might put a little speed on that order for plain paper we placed back there a month or so ago.

I mustn't close without telling you that we have an Honorary Chief Clerk without Pay. Hugh and Christine were married on the 18th, and are now settled down in Quarters No. 8 with the good wishes of all who know them for a long and happy married life in the Park Service. Brownie and I went over to Phoenix and stood up with them, for once Hugh admitting that I was the best man, and we had a very happy little wedding in a very pleasant little church. When the Civil Works and Public Works and E.C.W. blow over and we reach that financial desert where Chief Clerks can take a rest, they are going on a honeymoon.

With all the clamor and rush, the high pressure work we have had to put on this new machine of ours this last month, things have gone pretty well on the whole. We have a couple of bad spots to plug up next month, but we are getting to the point where we just reach out and take on any kind of an earthquake and issued a new set of instructions to the Custodians to order another first aid kit and tie into it. Running under the Civil Works has been a lot of fun in some ways!

Cordially,

Frank Pinkley