

A National Monument Underground

By S. R. WINTERS

The great Carlsbad Cavern, now a National Monument, has never been thoroughly explored. This immemorial home of bats may some day be known as one of the wonders of the world. Mr. Winters tells of our present knowledge of this vast cavern

TUNNELS so long that no one has yet searched out their ends; ceilings so high that torchlights fail to illumine them; weird beauty in a thousand shapes. All these await the observer in the Carlsbad Cavern, twenty-two miles southwest of Carlsbad, New Mexico. Withal, this little explored cave is already destined to be classified among the famous caverns of the world. For these reasons, a Presidential proclamation was recently issued designating it as a National Monument.

"The chambers in this cavern are the largest ever discovered," said Willis T. Lee, of the Geological Survey, United States Department of the Interior, in an interview with the writer upon his return to Washington, after having examined and photographed this phenomenally large and spectacular subterranean cavity. This superlative with reference to the magnitude of the chambers of this cave, an estimate from the conservative mind of the geologist, was voiced after Mr. Lee had examined literature on the subject of caverns at home and abroad. And as yet only eight miles of the cave have been traversed!

One room of this newly designated National Monument is more than half a mile in length and is several hundred feet wide—although nobody knows how wide. Its floor is 170 feet below the entrance, which was formed by the fall of a small portion of the roof. Within less than two miles from this point the floor descends 500 feet, and yet the bottom of the cavern reaches still deeper, since chambers and hallways have been discovered 200 feet lower. The depths of this subterranean cavity, it is conservatively estimated, lie 1,000 feet below the entrance.

Quite contrary to one newspaper report that the interior presented an array of colors, the materials are snow white. The limestone in which this immense cave has been fashioned is approximately 1,300 feet thick, and is underlaid by an equally thick series of beds of soft shale and sandstone that include thick beds of gypsum and rock salt. The occurrence

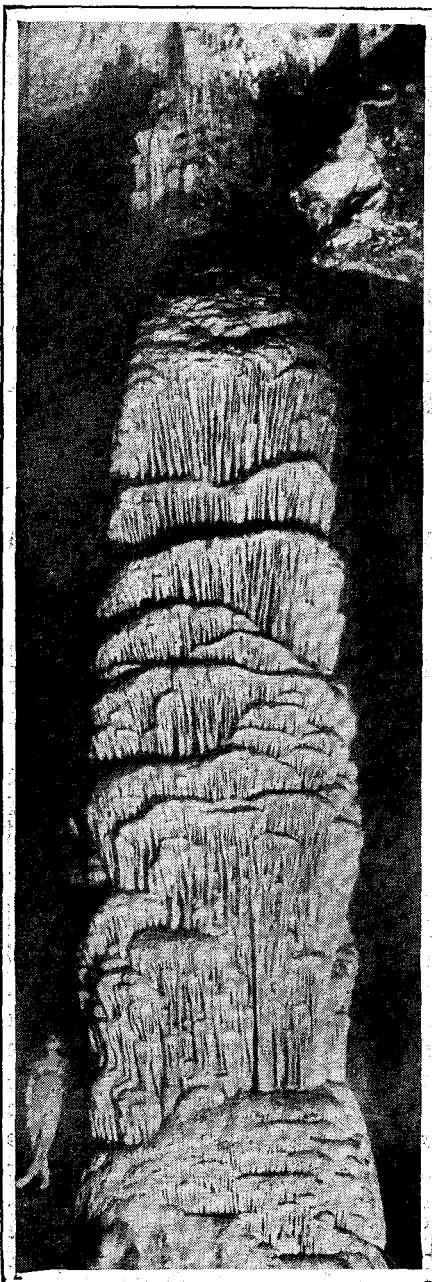


Photo by Ray V. Davis

A dome in the Big Room, a vast cave over half a mile long and more than 300 feet high

of these easily soluble beds under the 1,300 feet of hard yet soluble limestone may have produced a cavernous condition of the rocks that will show spectacular results, according to the Geological Survey.

The discovery of this monster hole underground had its origin in an unusual natural phenomenon. Bats making their exit at the close of daylight from a hole in the side of a valley attracted the attention of J. L. White and Bige Long, residents of southeastern New Mexico. That was in 1901, when this cave in the eastern foothills of the Guadalupe Mountains was first discovered. These original explorers penetrated the opening from which this army of bats emerged, and found a cave with vast deposits of bat guano. These deposits have proved to be a veritable mine for fertilizers, it having been estimated that at least 100,000 tons of bat guano have been recovered for the past several years, or from 1901 until the World War.

"As you stand there at twilight, bats begin coming out of this cave, and for three hours millions upon millions of them make their exit," Mr. Lee told me. "Where they go to and where they obtain feed is a mystery. They are so thick as they emerge from this cave that I reached up at random and grabbed a bat. They return to the cavern in the morning, consuming another three hours in making their entrance."

The recent expedition of this geologist of the United States Department of the Interior to the vicinity of Carlsbad, the principal town in southeastern New Mexico, was primarily for the purpose of examining a reservoir that had been tentatively selected for dam sites on the Pecos River. He did not find the prospective location for such an engineering project. He did, however, accurately appraise Carlsbad Cavern as a future wonder spot of the world.

Upon the return of Mr. Lee from New Mexico, the National Park Service recommended that this subterranean cavity should be made a National Monument. This recommendation has been favorably acted upon, and President Calvin Coolidge has already issued a proclamation setting it apart for this purpose. Meanwhile Mr. Lee has determined upon a system of nomenclature for the huge chambers. Instead of Greek names, In-

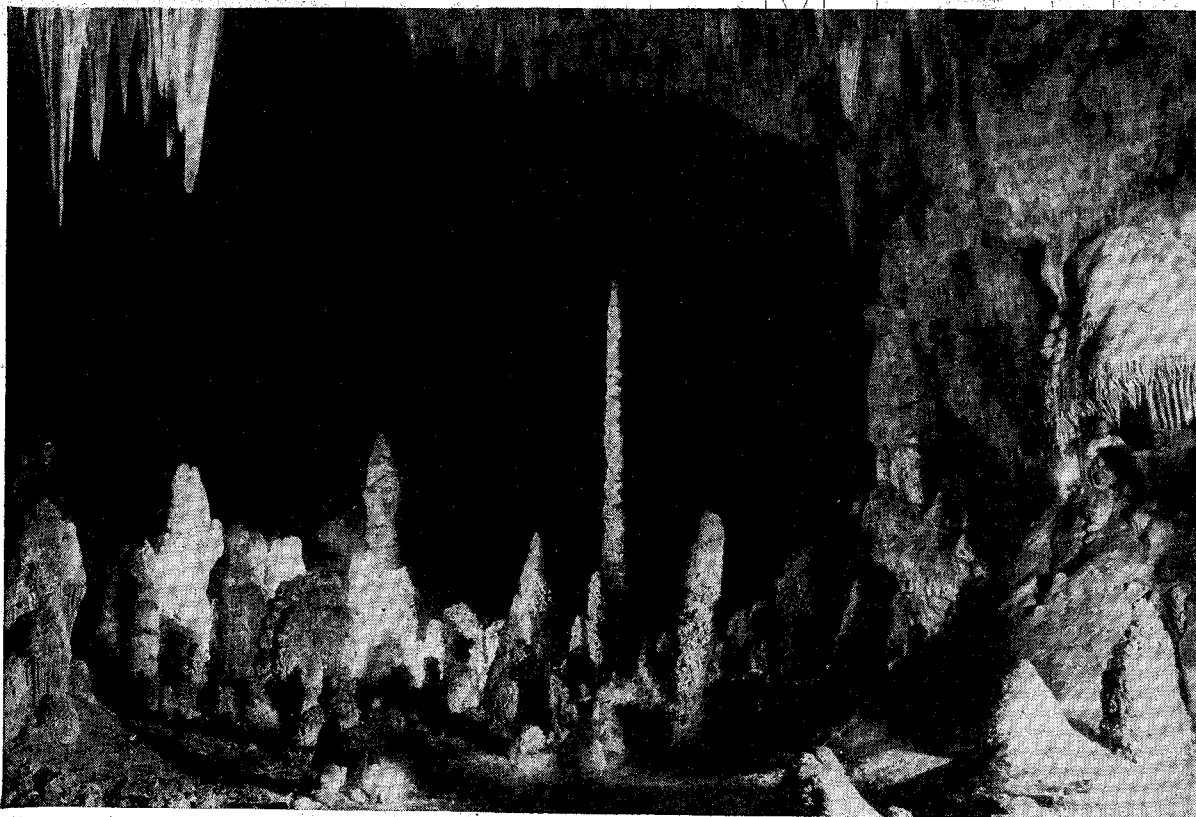


Photo by Ray V. Davis. International

The Totem Poles

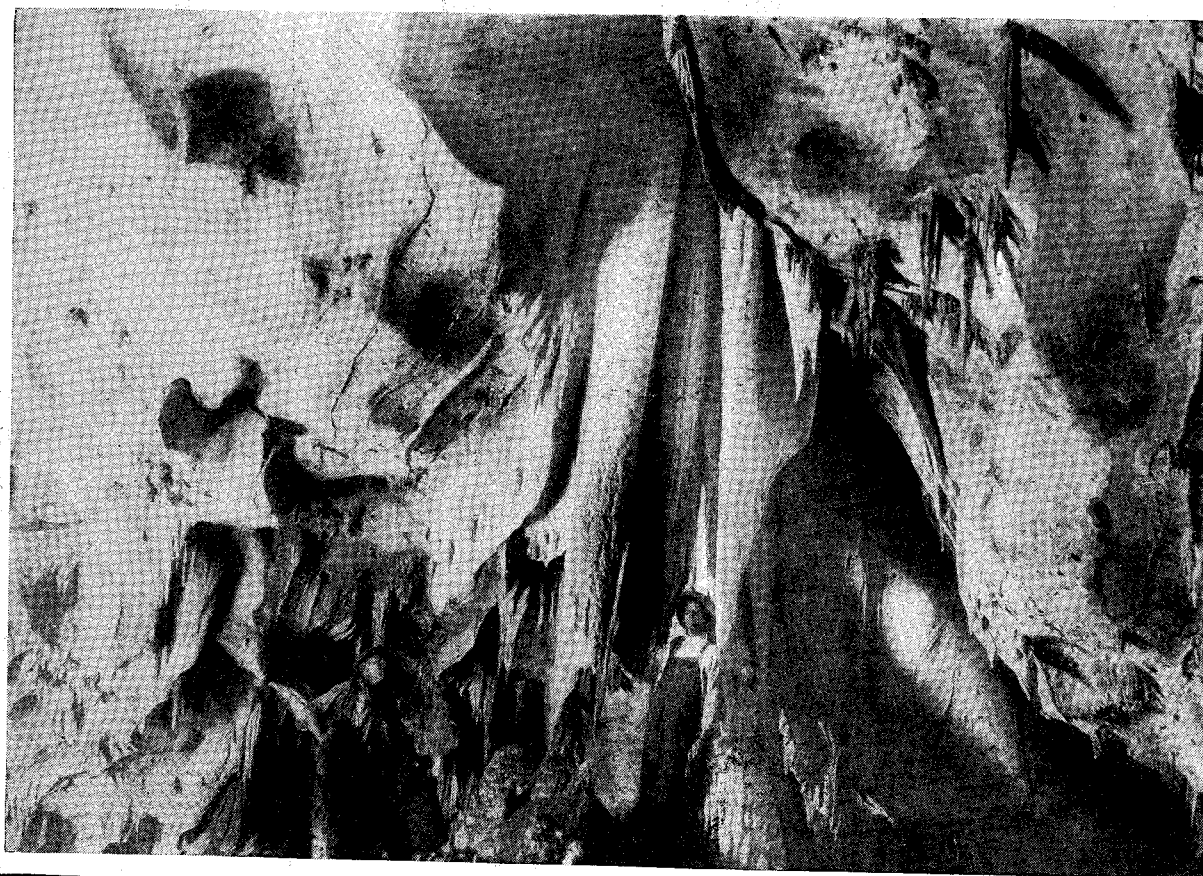


Photo by Ray V. Davis. International

Hanging Draperies of Lime

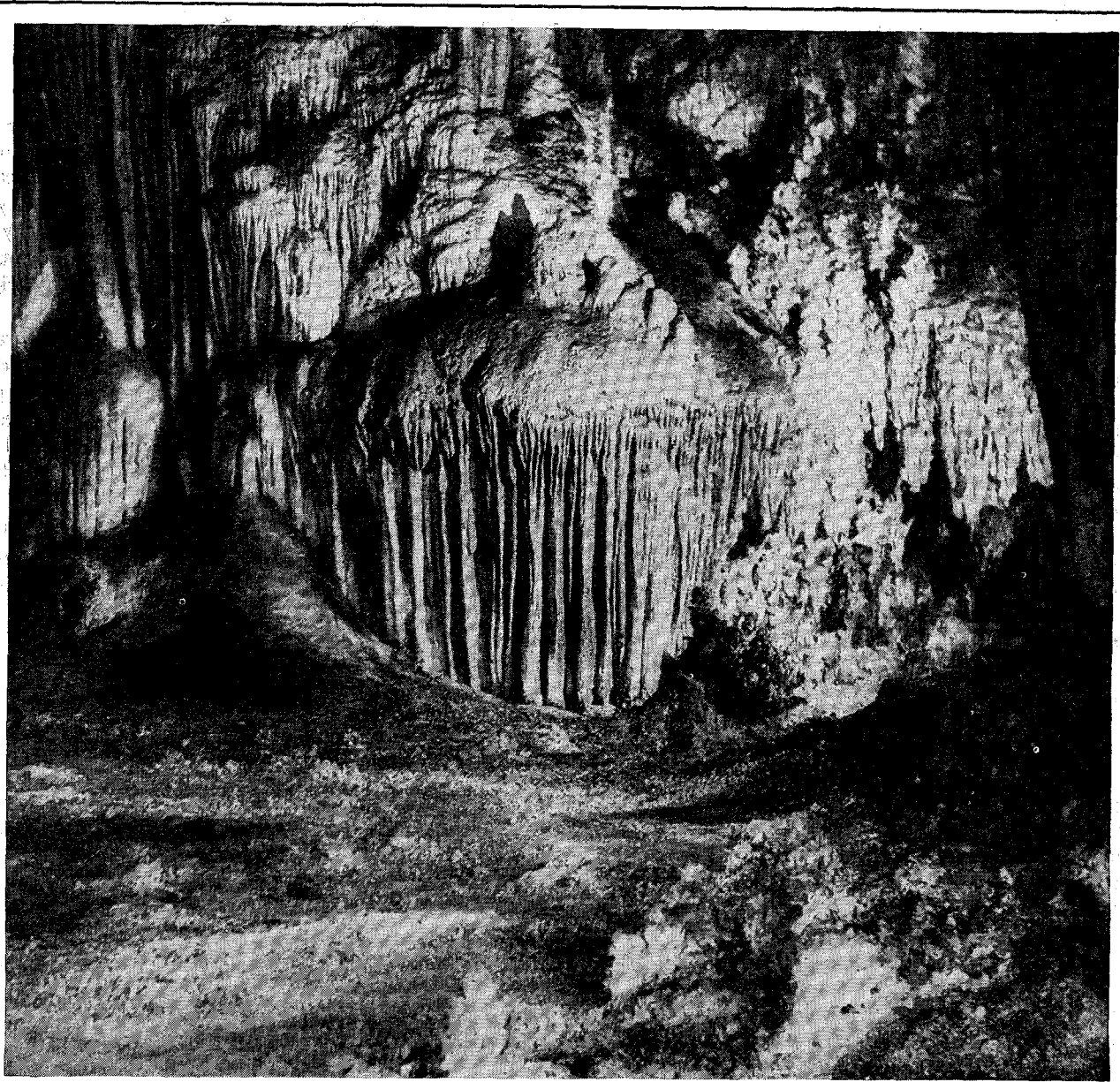


Photo by Ray V. Davis

Shinav Blanket—a curtain-like partition in the side of the Wigwam

dian mythology is the source for the naming of these underground passageways, which will likely in the future be traversed by thousands of citizens from all over the United States. For instance, one of the chambers has been designated as "Shinav," a name having its origin with one of the mythical Indian gods. "Yeitso Pillar" is another name applied to a beautiful column of onyx, which is named in honor of the mythical monster of the Navajo Indians. Fitting is it that the nomenclature of the chambers of this monstrous cavern should have its inspiration in Indian mythology, since this section of New Mexico is truly a habitat of the red men.

Until the facilities of the National Park Service for converting this wonder spot into a National Monument are operative visitors contemplating pene-

trating these miles of chambers should consider the conditions governing the present operation of the cavern. James L. White, the guide, who is in the employ of the commercial interests which are recovering the bat guano, lives in Carlsbad, thirty miles by roadway and twenty-two miles straight line to the cavern. He makes a charge for showing the cavern to tourists, and the only method now available for being lowered into this underground passageway is by means of a hoisting engine used by the company in recovering the bat guano. That is to say, if you visit this predestined famous cavern of the world at this time you will have to be lowered into the cave by means of a guano bucket.

The guano deposits are on the east side of the shaft of the cave, while the scenic views are located to the west of

the shaft. For approximately one mile these fertilizer deposits are collected by traversing a narrow passageway, and, as previously stated, about 100,000 tons of bat guano have been obtained during a period of fifteen or more years. The one natural entrance to this cavity is approximately 150 feet in width.

Carlsbad Cavern, though already discovered to the extent of being appraised as one of the famous caverns of the world, has not been thoroughly explored. In recognition of this fact, the National Geographic Society has now arranged to send Willis T. Lee to spend several months in the recesses of this monstrous subterranean opening in order that this hidden wonder may be revealed in all its details. As it is now, no one has traveled to the end of any passage in Carlsbad Cavern.

Platforms of the People

THE tabulation of ballots this week indicates fairly the thought of an important element in our National life. The table represents the entire country, sufficient ballots having been received from the Pacific, Mountain, and Southern Sections to balance in some respects the larger returns from the Central Agricultural, Central Industrial, and Coast Industrial Sections.

The views expressed are those of business men, lawyers, doctors, clergymen, teachers, students, engineers, farmers, and workers not generally included in the "white collar class." The percentages offer an interesting display of statistics, doubly interesting because the later returns serve to maintain the majority sentiments expressed during the early days of this inquiry, and therefore show that the country at large is of a single mind in its deliberations.

The ballots show independent thinking. Those designating themselves as Republicans, Democrats, or Independents in their political faiths frequently are at pains to point out that they do not stand with political leaders regardless of their practices. One is surprised to find so many ballots expressing no party preference. The majority of those recorded as Independent or unrecorded as to party preference seem to favor the present Administration. Some of these are probably Republicans who decline to be tagged with a party label until they are satisfied on many of the Presidential campaign issues, while others are probably habitually independent voters who like Coolidge but not his party.

In another way the returns are from independents. The editors of The Outlook have received many communications from persons who expressed the fear that large numbers of ballots would fall into the hands of propagandists and other agencies which would flood the returns in such a manner as to preclude any possibility of determining what the people are actually thinking. The danger of a flooding of the returns has not been great; but even so, against it we have taken quite adequate precautions. Thus far the ballots returned show no evidence of such attempts at propaganda. The vote has not been "stacked."

Many of the Democrats in the Central Agricultural Section favor compulsory freight-rate reduction, while Republicans and Independents are generally against it. While more than a third of the Democrats favor nationalization of the railways, still more oppose it, and nearly a quarter ignore the question.

The Central Agricultural Section is divided on the question of a Federal grain export corporation and Federal aid for farmers' co-operatives. The majority are against Federal price fixing. The Eastern States favor development of the St. Lawrence waterways equally with their Western neighbors, irrespective of party. The Southern and Pacific Sections favor extension of farm credits.

Half the Democrats favor Secretary Mellon's plan for tax reduction—more,

The Poll and the People

Thank you very much for the five hundred copies of the referendum platform. We have distributed these to the members of the League of Women Voters in Oberlin and are planning to hold a public mass-meeting in which the items listed are to be discussed. We are also giving publicity to these platforms in our local papers, and also in the Cleveland papers. We are urging that people give them careful thought and then mark them intelligently and mail them back to you.

So writes one woman who asked for extra copies of The Outlook's "Platforms of the People." It is a typical example of the response which The Outlook's plan has met with among thinking citizens.

in fact, than those who indorse Representative Garner's plan, which was devised under Democratic auspices. The Independents are almost as much in favor of the Mellon plan as are the Republicans. The question of tariffs finds sentiment equally divided in all sections. Half the men and women in the Southern Section favor the bonus for all veterans.

There is no doubt that the majority of the people favor rigid enforcement of the prohibition laws and are against any alteration of the law itself. A fourth of the Republican men and women in the Coast Industrial Section would change the law, likewise half the Independents in the Coast Industrial and Pacific Sections. The majority of the Democrats in the Coast Industrial Section would change the law.

Many women who oppose the idea of equal social, legal, and industrial rights for women point out that such legislation would eliminate the advantages women now enjoy. The same applies to the child labor question, many asserting that too strict legislation would handicap a child in supporting itself or contributing to that of the family. The vote against the Child Labor Amendment, however, is very light in every party group. For reasons not stated many persons oppose a Federal anti-lynching law. One man explains that the question is covered by existing laws against murder. Those op-

posing a Federal employment bureau are generally opposed to what they term the increasing tendency toward bureaucratic government. While a majority favor Federal aid for education, many dislike the idea because they think it would tend to destroy the self-governing rights of States and municipalities.

Immigration receives considerable attention. In the many letters addressed to the editors the writers are at pains to explain the urgent need for restrictive measures. The idea is suggested that all aliens should be registered and fingerprinted. Others would have a permanent research commission to inquire into and lend full publicity to all alien influences in politics, education, religion, and business.

Sentiment is overwhelmingly in favor of preparedness, of conservation, and of the reorganization of the executive departments.

All parties favor continuation of the Railroad Labor Board and are against abolishing injunctions in labor disputes. The Democrats in the Coast Industrial Section, a third of the Republicans and Independents in the Central Industrial, and a third of the Southern men and women favor nationalization of the coal mines.

The majority of Republican and Democratic men and women in the South favor the Ku Klux Klan. Elsewhere sentiment is overwhelmingly against it.

There is little indorsement of cancellation of foreign debts. Hundreds of persons have as many different ideas on the various matters pertaining to our foreign relations. There is little sentiment in favor of recognizing Russia.

Inasmuch as the weekly tabulation of returns indicates some very strong opinions among persons who obviously are American citizens residing in all sections of the country, their desires should prove valuable and informative to political leaders. The fact that it requires from one to three hours to mark the ballot, without making confusing statements as to preferences, should convince aspiring statesmen that many persons are thinking and will continue to think until the polls close in November.

The number of unflattering remarks directed at Congress in general and certain Congressmen in particular should convince the most skeptical that events in Washington are being closely followed. But then Congressmen will no doubt learn that for themselves when they set out electioneering in their own constituencies.