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# DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

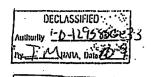
..... NATIONAL PARK

FILE No. 12

NATIONAL MONUMENTS

TEMPLE OF THE GODS

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## ASSOCIATED MOUNTAINEERING CLUBS OF NORTH AMERICA

Comprising Over 20,000 Individual Members

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Lake Placid Club, N. Y.
Appalachian Mountain Club, Boston and New York
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Colorado Mountain Club, Denver
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Hawaiian Trail and Mountain Club, Honolulu Klahhane Club, Port Angeles, Washington Mazamas, Portland Oraginal ARK Services Mountaineers, Search and Tacoma National Association of Andribon Societies, New York Washington Oragination of Charles of Charles

LeRoy Jeffers, Secretary;
Librarian, American Alpine Club, 476 Fifth Avenue, New York
Cot. 14, 1918.

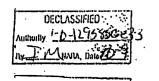
Hon.S.T. Mather,

Washington, D.C.

Dear Mr. Mather: -

I take pleasure in sending you a copy of the October 5th Scientific American containing an article which I have written on the Temple of the Gods in Utah.

Yours sincerely,



House	Joint	Memorial	No.

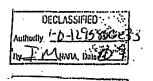
By Mr. King.

A MEMORIAL TO THE CONGRESS OF THE UNITED STATES TO CREATE THE TENTIE OF THE GODS NATIONAL MONUMENT.

To the Senate and the House of Representatives of the Congress of the United States:

Your memorialists, the Governor and the Legislature of the State of Utah, respectfully represent:

On the public domain within the boundaries of the Sevier National Forest, in the Pink Mountain region, near Tropic, Garfield County, Utah, there is a canyon popularly referred to as "Bryce's Canyon," which has become famed for its wonderful natural beauty. Inasmuch as the state and federal governments have indicated a desire that the natural attractions of our state and our country be protected and preserved for the enjoyment of posterity, therefore, your memorialists respectfully urge that the Congress of the United States set aside for the use and enjoyment of the people a suitable area embracing "Bryce's Canyon" as a national monument under the name of "The Temple of the Gods National Monument."



State of utah Executive Office

SALT LAKE CITY

February 27, 1919.

My dear Secretary Lane:

I am sending you herewith for your information a copy of a memorial introduced today in the lower house of our State Legislature, asking that Bryce's Canyon be set aside as "The Temple of the Gods National Monument".

Last summer it was my pleasure to visit this scenic wonder and I concur most heartily in the appeal that it be protected and preserved for the enjoyment of our people. In my estimation it is one of the most remarkable scenic attractions in our entire western country. I am very anxious that such action be taken as will make it a national monument before it has the opportunity to pass into private control.

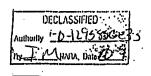
With kind personal regards, I am,

Sincerely yours,

Governor.

Honorable Franklin K. Lane, Secretary of the Interior, Washington, D. C.

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# DEPARTMENT OF THE INTERIOR

# NATIONAL PARK SERVICE

WASHINGTON

November 6, 1918.

Dear Tr. Jeffers:

I want to acknowledge receipt of jour letter of October 1/ to Director Mather, with which you inclose a copy of the "scientific American" of October 5, containing your article on the Temple of the Gods in Utah. We have read this article with a great deal of interest and will preserve it for future reference.

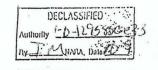
There is a movement on foot, as you know, to make this region a national monument. This is the first description of it that we have seen, but we have knows of the existence of this wonderful region for a year or more.

Cordially yours.

AC.

Mr. he loy Joffers, rublic hibrary, New York City.

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# SEVENTY-FOURTH YEAR

# THE WEEKLY JOURNAL OF PRACTICAL INFORMATION

VOLUME CXIX. NUMBER 14

NEW YORK, OCTOBER 5, 1918

10 CENTS A COPY \$4.00 A YEAR

The Temple of the Gods in Utah By Le Roy Jeffers, F.R.G.S., Member Explorers Club

ONE of the most remarkable formations to be found

NE of the most remarkable formations to be found in our wonderful southwestern country is the little known Temple of the Gods in southern Utah. Distant from any railway and off the main traveled roads, it has long remained hidden in the Sevier National Forest. The simplest way of approach is by a branch of the Denver and Rio Grande Railroad, which wanders southward through the central valleys of Utah, reaching at last the little village of Marysvale where an auto may be secured for the uphill climb of 55 miles through the mountains to Panguitch. Here is located the headquarters of the Forest Supervisor, who will direct one for the remaining 25 miles, part of which is over meadows where it is just possible to drive a car.

Perhaps the most interesting, and certainly the most difficult route to the formation is one which we recently traversed in the heat of midsummer. Leaving the north side of the Grand Canyon of the Colorado at Bright Angel Point we made a rapid run through the yellow pine and aspen forest of the Kaibab Plateau in northern Arizona, crossed the burning sands of the Kanab Desert, and reached the town of Kanab which nestles verdantly among the vermillion cliffs of southern Utah. We had come 80 to 85 miles before sundown and were ready for a similar journey to Panguitch on the following day. As all supplies that reach this country have to come by the route we were following we supposed the roads would be passable, but at frequent intervals we had to lift and push our car uphill through the deep sand. When it rains in this region all traffic is suspended for days by the impassable mud. As we work our way northward, the red cliffs are succeeded by white, and from the hamlet of Hatch, vivid pink cliffs

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hold the eye for many a mile to Panguitch. Over the road beyond to Marysvale, rapid travel is possible.

No traveler who finds himself in Panguitch should omit a visit to the Temple of the Gods. We could learn of no one who knew the way save the Forester, and we found it wholly unmarked, but eventually this interesting

The pink towers and battlements of Bryce's Canyon

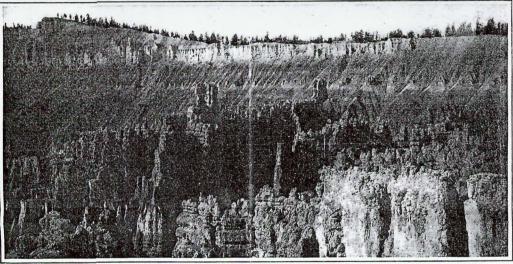
region will be often visited, for it combines a wealth of color with the most unusual forms. Here are great hill-sides composed of limestone, clay and gravel which have been eroded into fantastic towers 25 to 400 feet in height, some of them isolated and others linked together in companies. So symmetrical are these ribbed and fluted

pillars that they seem almost to have been turned with a lathe, and they often resemble kiosks or taper to minarets. But it is not merely this unique sculpturing that attracts and holds the attention, but especially is it their unusual coloring, for the temples are banded with red and salmon and yellow that is mixed with pink, while many of the spires are tipped with white.

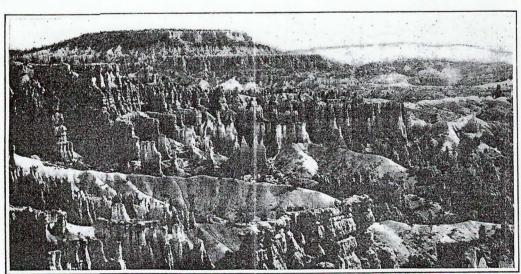
In the morning light the whole scene is bathed in orange and yellow, at noon it is flushed with rosy pink; while at evening from the canyon depths the temples glow with opalescent hues.

Two great hillsides have been eroded, separated by a ridge so low that the whole might be considered as one gigantic amphitheater, and, in fact, it is collectively known as Bryce Canyon. Looking across the largest or southern amphitheater toward the distant hillside we see as it were a vast city of prehistoric ruins; while, from the topmost bastion of the surrounding cliffs, we look down upon the stage setting of a fairy opera. Again we see a forest of pinnacles and tiny fingers, ghostly white, rising from the depths of the canyon like stalagmites. Far below is a labyrinth of narrow interlacing canyons leading to slopes dotted with pines and spruces whose green contrasts effectively with the orange-red of the canyon floor. Beyond are colored ridges and buttes that lead to the distant valley and the town of Tropic.

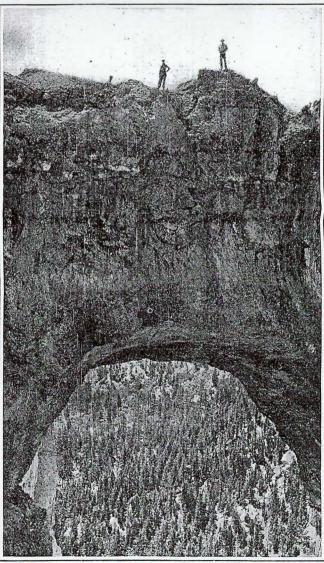
Sliding down the steep and treacherous slope of loose gravel we enter the gloom of a canyon only five or six feet wide, whose overhanging walls are several hundred feet in height. One may wander for hours in this maze of canyons studying the many colored walls and gazing upward at the narrow ribbon of blue sky; or he may explore the lower slopes amid the pines and the manzanita. From below the walls and towers have all the reality of castles, or elsewhere resemble the gigantite temples of India.



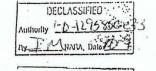
An extraordinary formation in the Temple of the Gods



View at the head of Bryce Canyon



Top of natural bridge in Sevier National Forest



# SCIENTIFIC AMERICAN

Founded 1845

Published by Munn & Co., Inc., 233 Broadway, New York, Saturday, October 5, 1918

Charles Allen Munn, President

Orson D. Munn, Treasurer, both at 233 Broadway

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The object of this journal is to record accurately and lucidly the latest scientific, mechanical and industrial news of the day. As a weekly journal, it is in a position to announce interesting developments before they are published elsewhere.

The Editor is glad to have submitted to him timely articles suitable for these columns, especially when such articles are accompanied by photographs.

### Will Tanks Win the War?

F they are strikingly successful, all new and notable weapons of warfare are sure to be credited in the public mind with powers of destruction that they do not possess. Let a novel invention prove itself on the battlefield, and more often than not, it will be trumpeted abroad and headlined in the press as the final, decisive weapon of the war. These exaggerations are due to a lack of knowledge coupled with a lack of the sense of proportion. The majority see the world through a telescope; their field of vision is limited—just one little circle cut out of the whole horizon. Few there are who look out through the wide angle of vision with which God has endowed them, and see not only the thing which is the object of their immediate interest, but also many other similar things to right and left of it. The man with the telescopic eye takes in one thing at a time, and if he approves it and is pleased with it, more often than not he will acquire a greatly exaggerated sense of its value and importance.

But what has all this to do with tanks? Just this: that many people have become so obsessed with what the tank has done as to undervalue the long established military weapons, and predict that the tanks will win the war.

But tanks alone will not win the war, not even if they descend upon the enemy as the locusts upon the Egyptians of old. Nor will airplanes win the war, nor submarines, nor shells, nor machine guns, nor even poison gas. The war will be won by the harmonious and well adjusted cooperation of all these with properly trained and officered infantry and artillery, directed by a General Staff, and all under the supreme control of one man.

Now this is not written to depreciate the work of the tanks. On the contrary, they give promise of emerging from the war as the most important military invention of the whole struggle. They have been successful from the very first; and the small and fast types that have figured in the great counter offensive of this summer have greatly increased the reputation of the tank as a weapon of attack and pursuit.

For a gun to realize its fullest offensive efficiency, it must be supplied with mobility and protection—mobility, so that it may move up against the enemy, and protection so that its advance may not be stopped by the rifle and shellfire of the enemy. That was the problem which confronted the Allies, when they found themselves face to face with the murderous fire of German machine guns that were to be counted by the hundred thousand. The tank was the solution of the problem, and it proved itself at the great battle of the Somme in 1916, when it swept across No Man's Land ahead of the British troops, silencing the German machine-gun nests with its six-pounder shells and machine-gun fire and moving forward unharmed by the enemy bullets.

But there is a limit to the gunpower, protection and speed of the tank. Like the sea battleship or cruiser, its design is a matter of compromise. Some qualities must be sacrificed to others; otherwise the tank will be big and heavy beyond all reason. Thus, if a 6-inch gun were to be installed in the French tanks in place of the present 75-mm. or 3-inch piece, it would be necessary to reduce either the motive power or the ammunition and fuel supply, or use a lighter armor plate for protection. If the motive power and speed of the larger tanks were increased, or the armor protection doubled, there would have to be a reduction in the armament. Unless this compromise were made the weight would increase very rapidly. This is shown in the case of the German tanks, one of which was captured by the French during a counter attack of the past summer. The armor plate forming the front of this tank was 11/4 inches thick, the sides about five-eighths of an inch, and the rear plate was over three-quarters of an inch in thickness. The British tank was built of one-quarter-inch plate and weighed 30 tons; the German tank weighed 45 tons, an increase of

The remarkable performance of the small "Whippets"

and "Mosquitoes," brought into the western front by the British and French, would suggest that future development will be in the direction of smaller size and greater speed and mobility. So nimble were the Whippets that they were able to cooperate with the cavalry, the tanks advancing on the roads, flanked on either side by cavalry, which was deployed in the adjoining fields.

Perhaps the greatest service rendered by the new weapon was the reintroduction of the element of surprise in attack. General Byng before Cambrai, omitting the usual bombardment, rushed the barbed-wire defenses with a strong fleet of tanks, and opened gaps through which the infantry followed. Hitherto an attack in force had been heralded by a heavy bombardment. This gave the enemy time to rush his reinforcement to the threatened sector in sufficient numbers to prevent an absolute rupture of the line. Omitting the bombardment leaves the enemy in ignorance of the impending attack, and the tanks and infantry are through the first line before the enemy realizes that the fight is on.

The United States Army will be well equipped with tanks; in fact our tank service bids fair to become the corps d'elite of the whole army, rivalling the air service in popularity and in the high quality of its personnel. It has drawn to itself some of the finest material to be found in the whole army, and the tanks themselves will not only embody the experience of the British tanks as originally invented, and of the French, but they will contain many new features which have been developed as the result of much experimental work in the United States.

# Food Facts versus Fallacies

N an endeavor to show the good results of its operations, the Food Administration, the other day, gave out figures, showing the total and per capita expenditures for focd in the United States during the past five quarters, itemized under nine major classifications. The per capita food bill was thus shown to have been  $3\frac{1}{2}$  per cent greater for the second quarter of 1918 than for the same period of 1917; and the claim was made that food prices in the United States, as a whole, have accordingly increased but  $3\frac{1}{2}$  per cent in the interval. The wide variance between this claim and individual experience has called out much comment; and in spite of our necessary tardiness, we wish to add our mite to the discussion.

If the Food Administration was going to compute our annual food bill, we have no quarrel with its action in basing its estimates on wholesale rather than retail prices. The former are more readily obtained and more accurately averaged—indeed, we should think that an effort to learn the total cost, to the ultimate consumer, of his food, must break down through lack of available data. And if the Food Administration was anxious to record its own achievements in the form of figures, the logical course was to confine itself to the wholesale market over which it has effective control.

But if we are able to agree with the Food Administration in its selection of the figures to be presented, we find it totally out of the question to follow it to the conclusions which it draws from these figures. Our food bill is one thing; the price of food is quite another. We should expect the exceptionally high-grade personnel of the Food Administration to realize that in the absence of data as to quantity bought, there is not the remotest connection between money spent and price paid.

It will not be disputed that the American diet has been profoundly modified as the result of war conditions and war prices. We eat differently, we waste less, many of us perforce eat less; and every act of voluntary or forced curtailment means so much less money spent for food. Yet the Food Administration's accountants tell us that this reduced expenditure is a mark of lower prices! On the same basis, if the price of wheat were to be tripled and consumption cut to one-third, they would have to assert that, since our wheat bill had shown no fluctuation, the price had remained the same, and that our impressions to the contrary were a delusion, created by local variations, and by hasty generalizations drawn from advances in other commodities!

The average consumer knows pretty well what he is paying for his goods; and the statement of September 23d must accordingly have visibly weakened the position of the Food Administration. This is a pity; because in stabilizing prices before prohibitive levels had been reached and in governing distribution and consumption, Mr. Hoover's bureau has done good work and lots of it—work which should get wider recognition than it has got. And it is even more a pity when we look into the figures closely enough to see that under proper interpretation they are most encouraging.

In spite of higher prices we spend less for sugar than we did. Our expenditures for meat have increased less sharply than have the prices, as every housewife knows them. Our bread bill has not kept pace with the price of wheat. Our bill for eggs has gone up much more rapidly than the price of eggs. And we spent, this summer, less than half as much for vegetables as we did last

In the light of all this, the figures tell us that we have cut down consumption where this was possible, that we have eliminated wastes, that we have adopted substitutes freely. They tell us that we are growing in home gardens an unexpectedly large share of the vegetables we eat; yet the Food Administration statisticians, in keeping with their general argument, must actually maintain that vegetable prices have fallen 60 per cent since last summer!

The figures presented by Mr. Hoover, when properly interpreted, tell the story of how admirably the American people have responded to the call of wartime conditions, and of how well we are led in our campaign to feed the fight for democracy. This side of the case, however, has been here officially ignored, and the figures unwittingly made to tell a tale which is not in accord with the facts, and which is of minor consequence anyhow. In the face of the enterprise which we have in hand, we expect food prices to go up; and we do not care greatly how far they go, provided they do not go to a height which interferes with that enterprise. The statement of the Food Administration would be unfortunate enough, if the figures used in it had no particular true significance. It is made far more so by the circumstance that they possess such a significance, one of great interest and value, which has been lost in the shadow of a forced and false meaning.

# Football Tactics on the Western Front

T requires no great stretch of the imagination to establish a parallel between the tactics of General Foch in his victorious assault on the western front and the methods of a successful captain in the American game of football. The Allies took the ball from the Germans on the 18th of July, and from that day to this they have been bucking the center or making end runs with such speed and dash, and such bewilderment as to the next point of attack, that the enemy has been pressed steadily back until he is standing on his goal line, with all the world waiting in breathless expectation to see whether the Allies can call a touchdown behind the Hindenburg line before time is called by Father Christmas.

We all have known that, considered individually, the Allied team was made up of better material, with a keener temper to its courage, a finer faith in its heart, and an absolutely unconquerable determination to win out in the end whatever the odds might be. All that it lacked was a good captain and perfect team work, and just a dash of fresh, young blood thrown in from the side lines to raise the spirit and temper of the team to the high pitch with which it started this great game of war, now some four years ago.

Marshal Foch provided the captaincy, and our gallant young lads gave the needed inspiration to the tired but unbroken spirit of the veterans of the French and British armies. The result has been magical. When it looked as though the German mass play was going to break through, the Allies got the ball, and by a series of team plays that have never been surpassed, surely, in the history of the great game of war, they have kept it and carried it to the German line.

Of course, the great French marshal does not talk in the terms of the gridiron; but any one who is familiar with the famous works he has written on the art of war will realize that the fundamental principles upon which he works are not dissimilar to those of the successful football captain. He tells us that the general who has obtained the initiative should carefully nurse the battle along its whole front, and keep it alive until such time as he is ready for his great decisive attack. This is exactly what the Marshal is now doing; and it will be quite in accord with his principles to nurse the active offensive through the whole of the coming winter months, hitting the line now on this wing and now on that, and now at the center, in preparation for an overwhelming break through next spring and summer, when he will have from three to four million American troops at his disposal.

Is the pick of our Army to be utilized as the mass of maneuver, to use a military term, that is to say, as the swift and hard-hitting quarter back of the Allied team? If so, it is a pretty good guess that before the autumn leaves turn brown in 1919, the ball will be carried to the Rhine; and, if Germany wants yet another season's play, that 1920 will see it carried to Berlin.

# British War Office Publishes a Technical Journal

I N connection with the Daily Review of the Forcign Press which has been issued by the General Staff of the British War Office during the war, supplements dealing with special subjects have been issued from time to time. Since last January there has been issued a fortnightly Technical Supplement, prepared with the coöperation of the Institution of Civil Engineers. This was originally intended for official circulation only, but it has now been placed on sale and the numbers from May 28th onward may be purchased at six pence each through booksellers.