

CHICKAMAUGA PARK

Its Superior Advantages as a Maneuvering Ground For Troops.

The Government finds itself fortunate in the ownership of such a ground for the assembling, instruction, and maneuvering of troops as the Chickamauga Park reservation proves to be, writes General H. V. Boynton, in the New York Sun. Under the act of Congress making the park a national maneuvering ground, and authorizing the Secretary of War to assemble there such a portion of the regular army as he may choose, and also to allow and arrange for the concentration and instruction of the National Guard, it was the intention to inaugurate such use of the reservation during the coming season. The Adjutant-General of the army was considering what should be done in this direction, and the troops of several States were looking forward to summer or autumn camping at the park. Suddenly the practical uses of actual war set these plans aside, and replaced them by others which involved the concentration of armies and their preparation for battle.

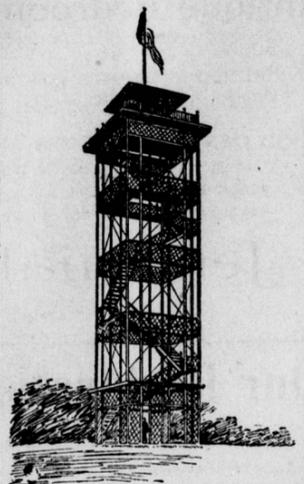
No other nation owns such a field for maneuvers. Eleven square miles of the tract are now fitted for regulation camps. Eight of these are in open forest, carefully cleared of underbrush, and three square miles are in fields. There are four square miles within the legal limits of the tract not yet purchased. This section is largely forest, and is available for maneuvers by which it might be desired to instruct troops in movements through virgin forest.

The entire area within the present limits of the park is clear of fences, and teams can drive over the fields and through the woods in every part of it. When the forests were cleared out the future use of the park for a camp of instruction was kept in mind, and orders were given that room should be made for teams to be driven through it in any direction. The forest portion of the tract was thus made practicable for artillery movements as well as for cavalry and infantry.

There are no swamp grounds in the park, and the soil in all sections is excellent for camps. The natural drainage is good, the whole tract rising gradually from the Chickamauga River, which bounds it on the east for several miles, to the spurs of Missionary Ridge on its western boundary. Aside from

been elsewhere surpassed in war. In addition to the marches over the actual ground of such contests, the observation towers on the main fields, the crest road on Missionary Ridge, the roads over Lookout, and the summit of the mountain itself, afford elevations from which every movement, either strategy or the tactics of the several battlefields, can be distinctly traced.

The dimensions of this national



LOOKOUT STATION COMMANDING MISSIONARY RIDGE.

maneuvering ground will appear from a few figures. The legal limits of the Chickamauga section embrace fifteen square miles. The crest of Missionary Ridge for eight miles is owned by the Government, as are the battlefields of General Sherman at the north end of the ridge, and of Hooker and Walthall on Lookout Mountain. The central driveway of the park system is already finished from the northern extremity of Missionary Ridge southerly for twenty-five miles through the Chickamauga field toward Lafayette. The remaining five miles are under construction. In an east and west direc-

tion the drive from Ringgold to the western limit is eleven miles. From Missionary Ridge at Rossville to Wauhatchie Ridge beyond Lookout Mountain is six miles. From the same point by way of McFarland's Gap the western boundary of the park to its southern limits is eight miles. The total mileage of the park system is over 100 miles.

A few concise statements will show the advantages which the park possesses for practical field instruction. Standing on the point of Lookout, the three mountain ranges and the river over which General Rosecrans's strategic campaign extended are all in full view. The front of his movement, when it reached the Tennessee River after crossing the Cumberland had a front of 150 miles, can be readily traced. All the battlefields mentioned in the course of this letter can be located, and the ground of all the tactical movements of the battles of Wauhatchie, Orchard Knob, Lookout Mountain and Missionary Ridge can be seen and readily understood. The observation towers upon the battlefields of Chickamauga are under the eye and show the relative positions of the movements of that engagement to those of the battles about Chattanooga. Ringgold Gap, the closing engagement in the series of battles embraced in the park system, is also clearly discernible.

Leaving Lookout Mountain and taking position on Orchard Knob, which was the headquarters of Generals Grant, Thomas and Granger throughout the battle of Chattanooga, a near view is obtained of the Confederate position upon Missionary Ridge, and the movements of the Union troops in the Army of the Cumberland, Army of the Tennessee and Hooker's army for their dislodgment can be readily followed. Passing to the crest of Missionary Ridge and driving along its summit, every feature of the Confederate position and all the Union movements as seen from that side are under the eye, as are the battlefields of Lookout and Chickamauga.

The observation towers upon the Chickamauga field, which occupy the highest elevations and rise above the timber, enable the student to trace all the tactical movements of the three days' operations upon that field. The Government road to Ringgold will be

undulating land is better for the growth of crops than a level soil,

completed early in the present season and the lines of battle at that point have already been ascertained and partially marked.

It was decided to establish the first camps in the Dyer field, which in one direction adjoin the ground where Longstreet's columns broke the Union lines on the second day of the battle, and caused a considerable portion of the right of the army to be driven from the field in confusion. At its other extremity, it sweeps up to the heights of Snodgrass Hill, where those famous but unsuccessful attacks of Longstreet's columns broke in unending succession of magnificent assaults, continuing from 1 o'clock till sundown, against the unshaken lines of Thomas. These camps will be the centre of a division line of three brigades, if the present plan of establishing the reserve division at the park is carried out.

It was also determined to establish the right brigade in the fields about the Bloody Pond in front of Widow Glenn's, which was Rosecrans's headquarters, and on the Viniard field. At this latter point, on Saturday, seven brigades on each side swept back and forth in succeeding victories and defeats, from noon until sundown, in one of the bitterest contests of those which marked the severe fighting of the two days. This portion of the line also embraced the brilliant fighting of the poet Lytle's command. The camp of the left brigade is also in plain view of the fighting ground about General Thomas's headquarters at the Snodgrass House, and will cover a portion of the territory over which Gordon Granger's troops rushed without orders toward the sound of battle, to the relief of General Thomas and the salvation of an army.

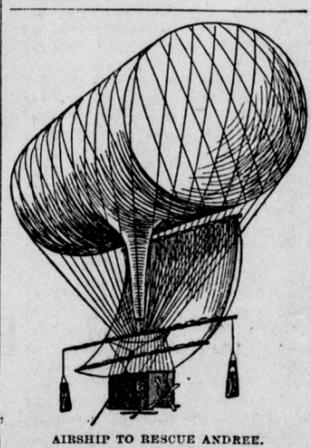
An adjoining camp overlooks the Kelly field, into which Breckinridge's division of Confederates, turning the Union left, penetrated on Sunday morning, and over which five brigade charges occurred in the movements necessary to drive his columns back. In front of this field also ran the four divisions of the Union left, which stood as firm as did Thomas's troops on Snodgrass Hill, and bore the brunt of frequent assaults by the entire right wing of the enemy.

The camps for cavalry have been established in the open country along the Chickamauga River from Alexander's Bridge to Reed's Bridge, thus occupying the ground where Forrest's cavalry, stationed to observe the right and rear of Bragg's army, was attacked by the head of General Thomas's corps, which, by a night march, had passed around the Confederate right to a position fully in its rear, and covering the roads to Chattanooga. Here Forrest's cavalry dismounted, and fighting as infantry, so fought, in well-ordered lines, with a pluck and endurance which carried them into the very flashing of the guns of the Union batteries, as to create the impression with Thomas's veterans that they were fighting infantry. On this portion of the field the soldiers now camping there will learn how for five hours a contest raged constantly at point-blank range and often almost hand-to-hand where the severity of the fighting is well illustrated by the single fact that one brigade of Forrest's command here lost a quarter of its entire force in killed and wounded in the first hour of the engagement.

TO RESCUE ANDREE.
An Expedition of French Scientists to Use an Airship.

An expedition sent out by the French Geographical Society arrived recently at New York. Its object is to reach the Klondike by balloon or airship, and then to go to the rescue of Andree.

Their airship is made of silk and is now in transit to Vancouver, B. C. Its capacity is 3000 cubic meters. It carries 3300 kilograms (about four tons). The great merit of the ship is that it is impossible for it to lose any gas. When any escapes it is forced into a separate chamber, where it is kept for use when needed. The great drawback to the airship is that it continually loses more or less gas.



AIRSHIP TO RESCUE ANDREE.

This flying machine is the most perfect in existence. It was built by M. Mallet, who built Andree's famous airship from the plans of the great aeronaut, La Chambre. It is oblong in shape and is constructed on the plans of the well-known De Lisse system. The machine is steered by a system of guide ropes, which are thrown from the car as occasion requires.

The River Nile has its rises, but those that do mischief are not frequent. During the last 1000 years there has been only one sudden rise of the Nile, that of 1829, when 30,000 people were drowned.

Undulating land is better for the growth of crops than a level soil,

HELPS FOR HOUSEWIVES.

Invisible Cement.

Isinglass dissolved in spirits of wine will produce a transparent cement which will unite broken glass so as to render the fracture imperceptible.

Glass Spoons.

Glass spoons are sold at the drug stores for the taking of medicines which may tarnish silver. Better, however, than these are the glass tubes which keep such powerful drugs away from the teeth as well; and better, perhaps, than both, is the attention to food and hygienic living, which does away with the necessity of any such heroic dosing.—New York Post.

Brass Clothes-Trees.

Brass clothes-trees are late additions in the furniture shops. They have the advantage of weight, which gives them stability, a quality often lacking in the article. With them are seen, too, standing brass towel-racks. It has been supposed that this form of the rack was practically eliminated from use, and to have such made of brass does not commend itself especially. Wet towels, thrown over the brass rack, would soon work injury alike to themselves and their support.

Cooking Fruits for Children.

"Baked apples may be used where they agree with children, and a raw scraped apple may be given," writes Mrs. S. T. Rorer in "Proper Cooking for the Nursery" in the Ladies' Home Journal. "Bananas should always be cooked, unless they are very ripe and the skins quite black. To bake a banana nicely you should have a porcelain or granite baking-dish. Strip the skins from the bananas, place them in a dish, sprinkle over a tablespoonful of sugar; add four or five tablespoonfuls of water, and bake in a quick oven for twenty minutes, basting once or twice. Serve warm. Blackberry jam, if properly made, is quite an important nursery food."

Ironing Napkins.

In ironing napkins, fold like tablecloths, with the selvages together, then iron straight up and down with the warp, not across. Fold first wrong side out, then fold back evenly to the edges. This allows it to open readily. If there is a monogram, fold outside. Fancy folding is a matter of choice, but most private families prefer the plain fold. Sherry allows but one way, the English pocket to hold the roll. English papers advertise paper patterns for showing how to fold linen in fancy shapes. Among these is the "prince's feather," where the napkin is folded first in pleats, then crinkled by running a silver knife or pencil through the centre fold. The "salt cellar" of the kindergarten is also a favorite shape.—Washington Star.

Along the Pie Path.

Cranberry Pie—Line a pie dish with plain pastry, then fill it with uncooked cranberries, add one cup molasses and four tablespoonfuls sugar. Cover with an upper crust and bake in a quick oven for 30 minutes.

Plain Pie Pastry—Cut one cup shortening into three cups flour; add one teaspoonful salt, one teaspoonful sugar and sufficient cold water to moisten. Turn out on the board and roll from you. Fold and roll three times and it is ready to use. It is much better if it stands on the ice over night.—Mrs. Rorer.

Rice Pie—Boil one-half cup rice until tender, after which add milk until it is a thin batter, the yolks of four eggs and a tablespoonful sugar. Bake with one crust until brown and spread over the top a frosting made by beating together the whites of four eggs, adding six tablespoonfuls sugar; flavor with lemon and put in the oven for five minutes.

Apple Cream Pies—One cup steamed apples, one cup sweet cream; sweeten to taste and flavor with cinnamon and lemon. Beat to a smooth cream, place in a rich crust and bake in a quick oven. Put the whites of two eggs and one spoonful sugar, beaten to a stiff froth, on top with a wet knife; return to oven a few moments until of a rich brown color.

Quick Mince Pie—Pare and chop two apples; add to them two broken crackers, one tablespoonful vinegar and one tablespoonful sherry, one-quarter cup sugar and one-half cup chopped raisins or clean currants. Add the grated rind of one lemon and one teaspoonful orange juice. Fill this into a pie dish lined with plain paste; cover and bake in a moderate oven for 30 minutes.

Chocolate Pie—Take one and one-half coffee cups sugar, one tablespoonful butter, yolks of three eggs, one cup sweet milk, two coffee cups flour and one teaspoonful soda. For the filling: Whites of three eggs beaten stiff, then add one and one-half cups sugar, three tablespoonfuls grated chocolate, one teaspoonful vanilla. Beat all together and spread between the cake, which has been baked in layers.

Orange Pie—Squeeze the juice from two large oranges, grate the thin yellow, mix together and save one tablespoonful. Beat together one-half pound sugar and one-quarter pound butter; add yolks of six eggs beaten light and the orange juice. Stir in the whites of four eggs beaten to a froth and pour the mixture into pie plates, lined with puff paste. Bake in a quick oven and when done spread with a meringue made of the two remaining egg whites, two tablespoonfuls powdered sugar, a pinch of soda and the tablespoonful of juice. Brown in oven. This will make two pies.

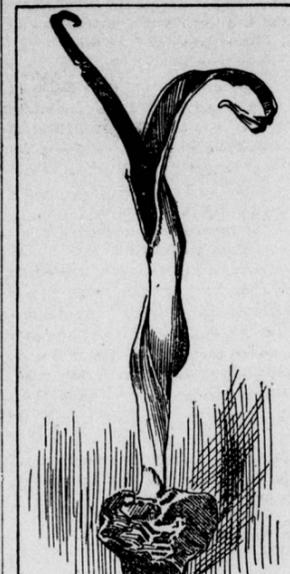
The design of the mace in the House of Representatives is borrowed from the emblems of the Roman Republic.

AN EXTRAORDINARY LILY.

A New House Plant, Recently Discovered in the Himalayas.

A new plant of extraordinary beauty, discovered in the Himalayas, has recently been cultivated. Placed on a shelf in a moderately warm room, the dry bulb, without having been planted, produces a flower that unfolds and blooms in midwinter. This curious plant belongs to the family of the calla lily. Its scientific name is *Savromatum pedatum*, and its bulbs are round and flat at the top.

The petal is of a rich, deep crimson, extending from a greenish yellow calyx, the inner surface of whose extremity shows crimson spots on a yellow ground. After blooming the planted bulb bears long, pointed leaves on a spotted stem, while the



WILL GROW ON A SHELF.
(New House Plant from the Himalayas That Blooms Without Care.)

unplanted one soon perishes.

Another interesting novelty in plants is the little mimosa spegazzini, first cultivated in the botanical garden in Rome. It was discovered in the Argentine Republic by missionaries.

The pretty little plant is much harder than the well-known sensitive plant (*mimosa pudica*). It has the same habit of shrinking and closing its leaves at the slightest touch. The leaves are soon after raised and opened, but at night they are invariably closed.

The sensitive movement of the plant is termed a threefold one. First, the feathery leaflets close, bending their points forward; then the little ribs that bear them move together, and at last the stem of the leaf sinks with its four spindles.

Facts About Our Country.

The United States are inhabited by only five per cent., or one-twentieth part, of the population of the world, but these five per cent. of the world's people use one-third of the world's iron, steel and copper, one-quarter of the world's product of wool and more than one-quarter of its cotton. Texas alone makes as much cotton as the entire South did before the war, although less than one-tenth of her area is in cotton lands. Since 1860 the number of farm-owning families in the country has increased from 1,850,000 to 3,392,000, while farm-tenants' families are only 2,132,754, against 1,508,750 in 1860. Farm owners are increasing more rapidly than farm tenants, and of the two combined 6,000,000 families are at work on the farms.

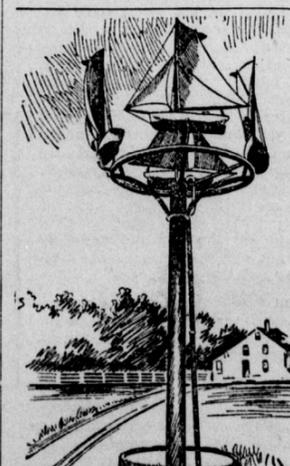
In Favor of Delay.

"Sometimes," said Mr. Cumrox, "I am inclined to think that people are unnecessarily slow in concluding enterprises of public interest."

"Well," replied his wife, "maybe it's just as well. I've been listening to Dollie's graduation essay, and it'll be a great thing if the public can wait till after it comes out."—Washington Star.

A Curious Windmill.

A farmer of nautical tastes living in Westchester County, New York, has constructed a curious windmill.



A NAUTICAL FARMER'S WINDMILL.

It pumps water from the Bronx into a Williamsbridge farm house. The four sails are correctly built and rigged. They fill, jib and tack as they swing around the circle, often making great speed.

THE MINUTE.

A button I am, man fastens by me
The robe of his future, his great "To be."
I close up the past so none can look in,
I hold fast forever the great "Has Been,"
I go like a pebble that drops in the sea,
I am one of the ticks of Eternity.
—Mary E. Page, in Boston Transcript.

HUMOROUS.

Belle—And so they were happily married? Nell—Yes; each of them married somebody else.

Brown—Jones strikes me as a man who is afraid to think for himself. Smith—Why doesn't he get married?

Father—Has the young man any prospects? Daughter—Well—er—Papa, he has relatives in the Klondike.

First Friend—So he married in haste! Did he repent at leisure? Second Friend—No; he repented in haste, too.

The Tramp—Can you tell me how I can get some work, sir? The Citizen (crustily)—Yes; buy a bicycle and try to keep it clean!

Bacon—And he's kind-hearted, is he? Egbert—Kind hearted? Why, I don't believe he ever said an unkind word, even to an alarm clock!

Mr. Hopeful—How dull it was at Wilkins' party, last night. She—Yes; in the early part of the evening. It got brighter soon after you left.

Mrs. Straight—My daughter has been very carefully brought up. Col. Blunt—But, notwithstanding, madam, I find her a very interesting companion.

"Now, Beanie, here's the medicine, and here's the dime papa left to pay you for taking it." "All right, mamma. If you take it and don't tell, I'll give you half."

"So you refused him?" "Yes; I told him it was better to make a great many men happy by being engaged to them than to make one miserable by marrying him."

Visitor (to insane asylum)—That man looks rational. Keeper—Yes, but he is really the craziest one in the whole place; he keeps wanting to see his mother-in-law.

Business Man (to clerk, whom he has caught kissing his typewriter)—Do I pay you to kiss my typewriter, sir? Clerk—You don't have to; I'm willing to do it for nothing.

"What," asked the dreamer, "would you do if you could be a king for a day?" "Me?" asked the practical man. "I'd borrow enough money to live on the rest of my life."

American Tourist—I understand, Marquis, that you fell in love with a distinguished American lady on account of her pretty foot. Marquis—Dat is it. Dat is it. De pretty way she foots de bills.

Cos Stick—I don't see you out riding lately, old chap. You don't mean to say you have tired of your wheel? Henry Peck—No, not at all; but you see my wife has taken my tires for the baby to cut his teeth on.

Simpkins—Did you notice how sheepishly Wigwag looked when I asked him how the fare was at his old boarding place? Tinkins—No wonder. They fed him on mutton chops three times a day as long as he was there.

"I understand that Jones is in hard luck." "Yes, indeed! He has been obliged to become an agent for the 'Hummer' wheel after insisting for years that the 'Scorcher' was the only wheel any self-respecting bicyclist could ride."

"How is your husband?" asked one of two women. "Very much run down," was the answer. "Perhaps he works too hard." "No, he doesn't. But he loses sleep and wrecks his constitution trying to figure out some way to live without working at all."

The Chinaman and the Bluejackets.

H. M. S. Rapid recently called at Cairns, in Northern Queensland, a town with a large Chinese population, among whom a boisterous party of bluejackets from the warship ran riot when on shore leave, with the result that a bill for \$625 damages was forwarded to the captain, together with the following explanatory letter:

Misser Captain—What for you send him sala man along my fellow-county-man shop, smash em window, steal em hat, blake em door! What for your sala man blake em window? Window no lun away. My country-man want blake em sala man; sala man lun away. Window more better sala man. I get your countyman makem bill long you. Suppose you no pay him, no telle your Missie Queen. She no pay, me tell em my emperor. You look out! Suppose she no pay him bill God save em queen no more. No more Chinamen callen queen good fellow. Good-by, Misser Captain, hope you no catche seasick.—Westminster Gazette.

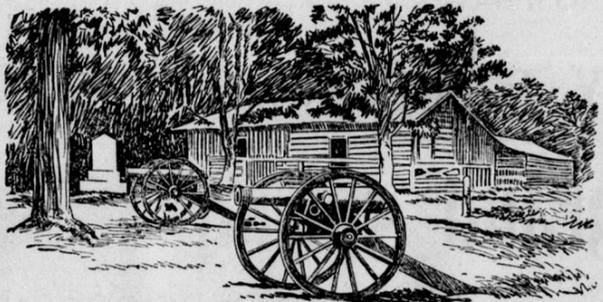
"Hobson's Choice."

The first man in England to keep a stable of hack-horses for hire was named Tobias Hobson.

His methods of doing business were strictly impartial. He strongly objected to one customer having an advantage over another. In accordance with his peculiar sense of justice, therefore, his stable rules were such that when a man came to hire a horse he was obliged to take the one nearest the door, and naturally the style of animal he got depended entirely on chance.

This unusual procedure attracted attention, so that when a man was obliged to accept something when he should have had his selection, he would say it was "Hobson's choice."

France and Germany are endeavoring to acclimatize the American lobster, as harder and healthier than his European congener.



THOMAS'S HEADQUARTERS, SNOGRASS HOUSE, CHICKAMAUGA.

the river it is a watered tract. Several small streams fed by abundant springs traverse it. There are never-failing ponds, meeting all requirements for the animals of infantry, cavalry, and artillery camps. Looking forward to the occupation of the park as a camp of instruction, the Commissioners have provided eight artesian wells in order that it might not be necessary for the troops to use surface water for drinking purposes.

The natural features of the park present every element of topography likely to be met with in actual campaigning. There are fields and forests, each of great extent, low ridges and precipitous elevations, some clear of woods and some in timber. The Chickamauga River, with its steep banks, affords every needed facility for instruction in bridge building. The roads of the park system extend along the crest of Missionary Ridge for eight miles and cross Lookout Mountain through the field of the "Battle Above the Clouds." All the roads by which the Union and the Confederate armies approached and left the various fields within the limits of the park have been highly improved, and give easy access to every portion of the seven battlefields about Chattanooga which are reached by the mileage system of the park. These are Chickamauga, Wauhatchie and Brown's Ferry, Orchard Knob, Lookout Mountain, Missionary Ridge, Tunnel Hill, and Ringgold.



ENTRANCE TO CHATTANOOGA CEMETERY.

Practice marches over these roads will make known to officers and men alike the unsurpassed strategy by which Chattanooga was finally secured, the intricate and quick tactical movements of notable battles, and the splendid fighting of both sides, which has not