

# Will the Washington Monument Stand?

**INTERESTING FACTS ABOUT GIANT STAFF BUILT ON WHAT ONCE WAS SHIFTING SAND OF POTOMAC BOTTOM.**

BY RENE BACH.

WASHINGTON, Feb. 20.—If we are dragged into war with a European power and the enemy can smash our fleet, one of her next steps will be to enter the Chesapeake through the unfortified gateway at Hampton Roads and thence send ships up the Potomac to destroy Washington.

One 14-inch shell would demolish the Washington Monument, which, it is likely, would be the first object aimed at. The invaders would probably claim that the shaft was being used as a signal station. A second projectile, if well aimed, would wipe out the White House.

Secretary of War Stanton, consulting with Mr. Lincoln on a certain occasion, when the Confederate ironclad Merrimac was said to be on her way to Washington, looked out of a window that commanded a view of the Potomac and remarked: "It is not unlikely we shall have a shell from one of her guns in the White House before we leave this room."

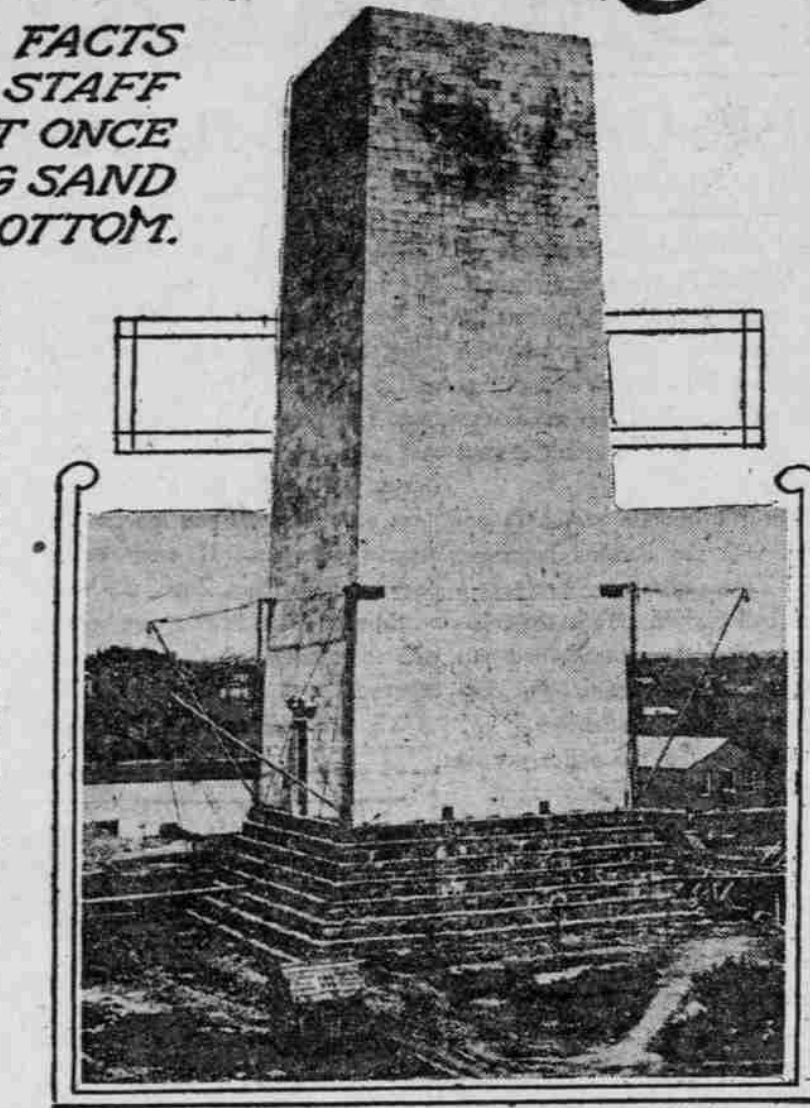
The Merrimac failed to arrive; likewise the expected shell. But the river road to Washington is still open, barred only by the fleet. An enemy may use it yet; and if anybody imagines that he would respect the historic sanctity of the memorial to the Father of His Country, recent doings in warfare have conveyed no lesson. He would regard it merely as an attractive target to shoot at.

Our own Army engineers have repeatedly said that nothing improbable, short of an earthquake, could knock the Washington Monument down. They have neglected to take into account an always possible shell from a high-power naval rifle. Such a projectile, of 14-inch caliber, fired from a distance of two miles, would strike the shaft with force sufficient to lift 1000 tons 50 feet into the air. It would knock the monument to smithereens.

As a matter of fact the monument is not so planted as to possess ideal stability. It stands not upon the rock of mother earth, as ought to be the case, but upon a small hill that is hardly more than a big mound, and whose material of clay and gravel was anciently part of the shifting bottom of the Potomac River. The top of the hill is only 25 feet above the river's level at low tide, and formerly there was a large pond, called Babcock's Lake, within 100 feet of it on the north—a backwater of the Potomac, which was filled into prevent seepage of water beneath the foundation.

The site, curiously enough, was originally picked out for a proposed equestrian statue of Washington, for which money was voted in 1783 by the Continental Congress. The idea was abandoned, but 40 years later a movement to erect a giant shaft was started by patriotic citizens, subscriptions being solicited. The cornerstone was laid in 1848, but, when the monument had reached a height of 150 feet, the money (about \$500,000) gave out, and it remained for more than three decades an unsightly stump.

Then Congress was persuaded to take the matter in hand and made the appropriation requisite for the completion of the memorial, which, including the sum originally expended, cost



The Monument as it stood for thirty years—on an unsightly stump.

\$1,300,000. The work was intrusted to Army engineers, who to start with, were obliged to make over the foundation. The latter was of rubble and too small. As much of the rubble as possible was dug out from beneath and replaced with concrete, the same material being used to extend the outward-slanting underground base, which, originally 80 feet square, at the bottom, was made 126 feet square. In addition the depth of the base was increased by 13½ feet.

The monument was at length finished in December, 1884. It weighs 81,120 tons, and contains 23,000 stones. It tapers one-fourth of an inch for each foot of its height, and is faced from top to bottom with marble. The first 150 feet (representing the portion of earlier construction) is of marble backed with rubble; above that, for 200 feet, the backing is of New England granite. Above this the shaft is all marble. Its total height is 555 feet 5½ inches.

Inside, from the bottom to the top, runs a circular iron staircase of 999 steps. Thus the monument might be described as an iron tower within a stone tower. The staircase has 50 landings, and inside of it runs an electric elevator, for the convenience of visitors who wish to ascend to the little room in the peak of the shaft, which has windows for light, and through which one may survey all of the City of Washington and a vast area of Virginia and Maryland.

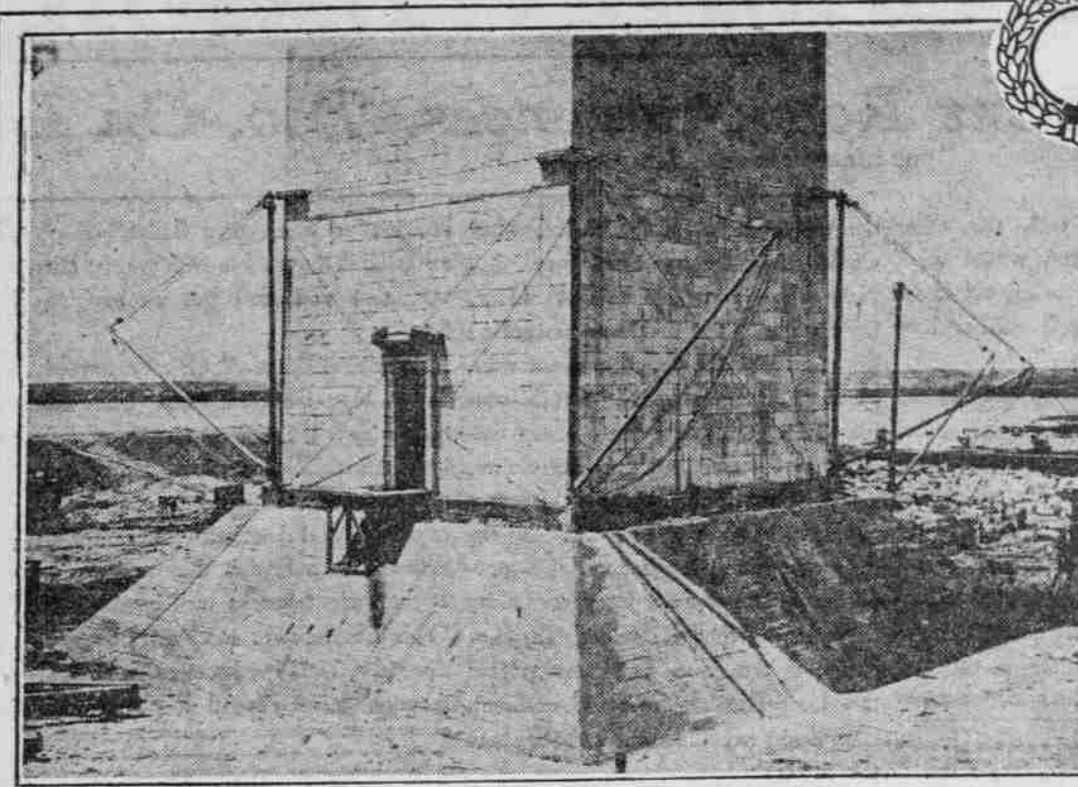
The size of the shaft may be judged from the fact that an army of 12,000 men could be comfortably hidden in its interior. It top is a pyramid 55 feet high, the capstone crowned with a cap-

piece of pure aluminum. This capstone, nine inches in height and weighing 100 ounces, was the largest piece of aluminum ever cast, up to 1884, when that metal, now so common and cheap, was rare and costly. Lightning rods of copper run from it to the bottom of the monument and deep into the ground. They are very necessary as a means of protection, inasmuch as the structure, so lofty and standing isolated on a hilltop, invites the fires from the skies. It has, in fact, been struck on many occasions, but, thanks to the defense described, has escaped injury.

Congress allows \$12,500 a year for the upkeep of the monument, in which a number of watchmen and caretakers are regularly employed. Its every tremor is observed and recorded with the help of a leaden plummet suspended from the top of the shaft by a copper wire. Substantial though its construction is, it always perceptibly in the wind. A big storm will bend it, as much as half an inch out of the perpendicular. In summer it is slightly taller than in winter, owing to expansion of the stone by heat, and in the latter season the width of the south side at the base is half an inch greater than that of the other sides.

Many people who come to Washington entertain a strange notion that the monument is a lighthouse, and, on traveling to the top, are disgusted to find no lantern there. But, although there is no lantern, the aluminum tip in the later afternoon of any sunny day throws a flash that can be seen from the summit of the Blue Ridge, at Snicker's Gap, 43 miles away.

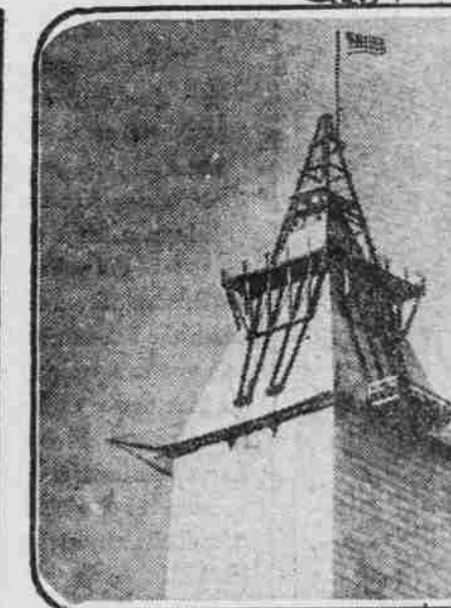
All sorts of cranks visit the Washington monument. One of them, a few



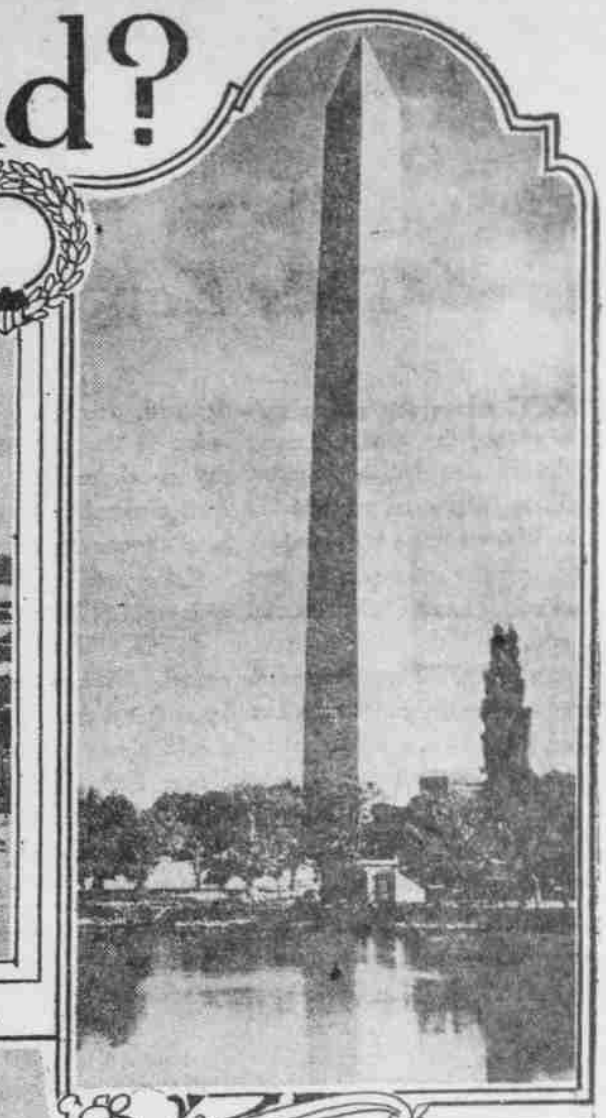
Extending the Old Base With Concrete.



Digging out Rubble from Under the Base, to Replace With Concrete.



Putting on the Capstone.



The Washington Monument Today.

hands, feet, or beaks of birds. A beautifully executed American eagle has lost its beak; a cow is minus her horns. Any feature of a carving that could be knocked off with cane or umbrella has been regarded as suitable loot by the patriotic visitor. One sculpture in relief, the offering of the workmen of a great locomotive factory, and representing an engine, has been deprived of all of the wheel spokes that were separable from the art-work.

The Father of His Country, on one tablet, has been bereft of his nose. In the Pennsylvania stone the forefinger and thumb of William Penn are gone. The head of a female figure in the carving presented by the American Medical Association has been broken off.

Once in a while a depredator in this line has been caught in the act, and mildly punished. To prevent such vandalism is difficult, of course. With not more than half a dozen caretakers on hand at any one time, how are 50 landings to be watched? Negroes, hoodlums and other irresponsible persons travel to the top in the elevator, run down the stairs, and do whatever damage seems to them amusing. Then there is always the collector of "souvenirs," who is one of the most conscienceless of vandals.

It is interesting to know that the original design for the Washington monument, drawn in 1846, and which was strongly recommended for adoption by John Quincy Adams, Zachary Taylor, Millard Fillmore, Daniel Webster and Henry Clay, called for a base which was to be a circular colonnade, or "parthenon," 250 feet in diameter and 150 feet high, supporting an obelisk 500 feet in height. The "parthenon" was to be used as a hall for patriotic statuary—somewhat like Statuary Hall in the Capitol today—and was to be adorned by a gigantic four-horse chariot, surmounting the entrance. Happily, however, better counsel prevailed, and, as a result, the monument as it stands today is of a grandeur and simplicity expressive of the character of the great man of whose fame it is destined to be, let us trust, an everlasting memorial.

years ago, was much provoked because he was not allowed to throw the ashes of his deceased wife out of a window at the top. If he had not asked permission to do so, however, nobody would have thought of interfering. Men bringing parachutes, and wishing to use them for a drop from the top of the shaft, have had to be excluded on more than one occasion. But no objection was made to the experiment of a baseball player who, after two or three unsuccessful attempts, did actually succeed in catching a ball tossed out of the little room so near the sky.

There are in the monument 176 memorial tablets, set in the interior walls. Thirty-nine of these were contributed by various states of the Union, 10 by foreign countries, 20 by cities, 30 by lodges and societies, and nine by private individuals. None of them, oddly enough, is to be found on the 13th landing—an avoidance manifestly attributable to superstition. Many of these tablets are badly decayed, owing to dampness, and others have suffered mutilation at the hands of vandals.

While the monument was in process of building, the tablets were stored in a shed, near by, unguarded, and one of them, sent by the Pope, was stolen by members of the Know-Nothing party. Nobody knows what became of it, but it was understood that the thieves, who were never caught or punished, broke it to pieces and threw the latter into the Potomac.

Quite a number of tablets were contributed by patent medicine and other concerns which desired advertising. These were not rejected; but they disappeared, and only within recent years has the fact come out that they were quietly interred in the hill on which the monument stands. There they lie to this day, doubtless, buried. Greece sent a stone taken from the ruined Parthenon at Athens, and bearing the inscription, "George Washington, the hero, the citizen of the new and illustrious liberty."

The stone of the Mother of Presidents is inscribed: "Virginia, who gave Washington to America, gives this granite for his monument."

Today the condition of 76 of the tablets is described in a War Department report as "fair to good." Forty-one are chipped, scratched, cracked or broken. Thirty-nine are discolored, stained or spotted by damp. Twenty-four are defaced beyond recognition. The vandals have employed every practicable means to injure or destroy the memorial stones. Some of them are scribbled over with lead pencil and stained with tobacco juice. Nevada's contribution has lost all but one of its silver letters. The carven designs in other cases have lost heads,



## WASHINGTON AS A HERO

WE KNOW George Washington as a war hero, and as a great statesman, but he was a real hero long before he was known in either of these capacities. He was a very young man, about 13 years of age, and he did a brave and wonderful deed. One day he was walking through a woods alongside a rushing stream of water. He was dreaming of the future, and of the deeds he meant to do for his country, when the screams of a woman in distress rent the air. The woman came running along the stream and when she saw the young man she called: "Oh, sir, will you not help me to save my child? He has fallen into this water and he will be drowned if some one doesn't come quickly to his rescue."

Behind the woman were some workmen who advised Washington thus: "It's no use to risk your life, too. If

you jump in you will kill yourself on the rocky bed of this stream. You cannot possibly save the child, so there is nothing to be gained by so foolhardy an act."

While the men were talking Washington was taking in the situation, and before they had ceased, he threw off his coat and without a moment's hesitation he leaped into the foaming waters.

The mother sank on her knees and with a "Thank God he will save my boy," she fainted away.

Washington followed the trail of the little white dress which was fast floating towards the falls. His progress was slow, despite his fine swimming, and at times it looked as though he would be dashed to pieces on the rocks that protruded from the water. Then again, the current would bear him un-

der, and he disappeared from the view of the anxious watchers on shore. Twice the boy went under, but Washington was fighting for a precious life, and he bravely struggled on. Now he and the boy were nearing the falls, the most dangerous part of the stream, and for a moment, which seemed like an eternity, it looked as though they were both lost. Redoubting his efforts, he plunged forward, and with his strong arm he caught the boy just as he was about to be hurled over the falls. He caught on to a projecting rock for support, and with a mighty effort he held the child high in the air so that his mother could see that he was saved. The mother had regained consciousness by this time, and with a shout of joy, she again sank on her knees and gave thanks to God for his goodness in sending the brave Washington to her just in the nick of time.

Years after, when Washington became famous, the little boy, now grown to manhood, loved to tell his comrades how his life had been saved by the great George Washington, who occupied the place at the head of the Nation. One of his hearers interrupted him to say: "Suppose he had been killed?"

"But he didn't," laughed the other. "We are both very much alive to tell the tale." Then with reverence in his voice he murmured, "He is my hero!"

### WASHINGTON'S BOYHOOD.

George Washington, who bravely fought To set our country free, Was, when a boy, his parents' joy, Like every boy should be.

He never feared his father's wrath Enough to tell a lie. In age and youth he loved the truth And for its sake would die.

A scholar and a sportsman, too, He liked both work and play; He'd always fight for what was right And never went astray.

He liked to ride unbroken colts And conquer horses wild. He'd let them plunge and kick and lunge Until he made them mild.

One day when he was but a lad, He undertook to train A vicious horse who tried, of course, To throw him, but in vain.

His efforts were so furious And frantic, it is said, That, by the strain, it burst a vein And to the ground fell, dead.

## Washington Anecdotes

WHEN Washington was visiting a friend in one of Virginia's towns he was introduced to the minister of the parish. The parson acknowledged the introduction by a low bow and stood conversing with Washington, holding his hat in hand.

"Put on your hat, parson, and I will shake hands with you."

The parson replied: "When I think



"Put on your hat, parson, and I will shake hands with you."

of all the wonderful things you have done for the country, I dare not put on my hat in your presence."

"You did as much as I," answered the General.

"No, no!" protested the minister. "Yes, yes," insisted Washington, "you

did what you could, and I have done no more."

Washington traveled a great deal and always took a servant with him. He was accustomed to pay the same for his servant as he did for himself at most of the inns at which he stopped. One time, however, he reached an inn where the landlord made a difference in the price and when Washington asked for his bill he noticed that his servant's charge was 3 shillings, while his expense was 3 shillings, nine pence.

Washington called for the host and asked for the reason for the difference. "He is only a servant," answered "mine host."

"But he eats as much as I do," said the guest, and he insisted on paying the same for both.

One day, as Washington was walking along the street, a negro slave passed him. The slave deferentially raised his hat to the great man. Washington immediately raised his in acknowledgment. The brother officer was amazed. "What do you raise your hat to a negro?" he asked.

"Would you have me less polite than a slave?" was Washington's calm reply.

### At the Age of Thirteen

At the early age of 13, George Washington drew up a set of original rules for his future conduct, which he tried to live up to the rest of his life. He called them "Rules of Civility and Decent Behavior in Company." There were 54 in all. Here are a few of them to show you the earnestness and thought of a boy of only 13 years of age.

"Speak not when others speak, sit not when others stand, and walk not when others stop."

"Turn not your back to others, especially in speaking; jog not the table or desk on which another reads or writes; lean not on anyone's arm."

"When a man does all he can, though he succeeds not well, blame not him that did it."

"Speak not injurious words either in jest or earnest. Scoff at none, although they are occasioned."

"Deduce not from others, but neither be excessive in commending."

"Associate yourself with men of good

quality if you esteem your own reputation, for it is better to be alone than in bad company."

"Speak no evil of the absent, for it is unjust."

"Use no reproachful language against anyone, neither curses nor revilings."

"Be not impatient in urging your friends to discover a secret."

"Understand not what you cannot perform, but be careful to keep your promise."

"When you speak of God or his attributes let it be seriously, in reverence and honor."

"Labor to keep alive in your breast that little spark of celestial fire called conscience."

"Be not impatient in urging your friends to discover a secret."

"Understand not what you cannot perform, but be careful to keep your promise."

"When you speak of God or his attributes let it be seriously, in reverence and honor."

"Labor to keep alive in your breast that little spark of celestial fire called conscience."

"Be not impatient in urging your friends to discover a secret."

"Understand not what you cannot perform, but be careful to keep your promise."

"When you speak of God or his attributes let it be seriously, in reverence and honor."

"Labor to keep alive in your breast that little spark of celestial fire called conscience."

"Be not impatient in urging your friends to discover a secret."

"Understand not what you cannot perform, but be careful to keep your promise."

"When you speak of God or his attributes let it be seriously, in reverence and honor."

"Labor to keep alive in your breast that little spark of celestial fire called conscience."

"Be not impatient in urging your friends to discover a secret."

"Understand not what you cannot perform, but be careful to keep your promise."

"When you speak of God or his attributes let it be seriously, in reverence and honor."

"Labor to keep alive in your breast that little spark of celestial fire called conscience."

"Be not impatient in urging your friends to discover a secret."

"Understand not what you cannot perform, but be careful to keep your promise."

"When you speak of God or his attributes let it be seriously, in reverence and honor."

"Labor to keep alive in your breast that little spark of celestial fire called conscience."

"Be not impatient in urging your friends to discover a secret."

"Understand not what you cannot perform, but be careful to keep your promise."

"When you speak of God or his attributes let it be seriously, in reverence and honor."

"Labor to keep alive in your breast that little spark of celestial fire called conscience."

"Be not impatient in urging your friends to discover a secret."

"Understand not what you cannot perform, but be careful to keep your promise."

"When you speak of God or his attributes let it be seriously, in reverence and honor."

"Labor to keep alive in your breast that little spark of celestial fire called conscience."

"Be not impatient in urging your friends to discover a secret."

"Understand not what you cannot perform, but be careful to keep your promise."

"When you speak of God or his attributes let it be seriously, in reverence and honor."

"Labor to keep alive in your breast that little spark of celestial fire called conscience."

"Be not impatient in urging your friends to discover a secret."

"Understand not what you cannot perform, but be careful to keep your promise."

"When you speak of God or his attributes let it be seriously, in reverence and honor."

"Labor to keep alive in your breast that little spark of celestial fire called conscience."

"Be not impatient in urging your friends to discover a secret."

"Understand not what you cannot perform, but be careful to keep your promise."

"When you speak of God or his attributes let it be seriously, in reverence and honor."

"Labor to keep alive in your breast that little spark of celestial fire called conscience."

"Be not impatient in urging your friends to discover a secret."

"Understand not what you cannot perform, but be careful to keep your promise."

"When you speak of God or his attributes let it be seriously, in reverence and honor."

"Labor to keep alive in your breast that little spark of celestial fire called conscience."

"Be not impatient in urging your friends to discover a secret."

"Understand not what you cannot perform, but be careful to keep your promise."

"When you speak of God or his attributes let it be seriously, in reverence and honor."

"Labor to keep alive in your breast that little spark of celestial fire called conscience."

"Be not impatient in urging your friends to discover a secret."

"Understand not what you cannot perform, but be careful to keep your promise."

"When you speak of God or his attributes let it be seriously, in reverence and honor."

"Labor to keep alive in your breast that little spark of celestial fire called conscience."

"Be not impatient in urging your friends to discover a secret."

"Understand not what you cannot perform, but be careful to keep your promise."

"When you speak of God or his attributes let it be seriously, in reverence and honor."

"Labor to keep alive in your breast that little spark of celestial fire called conscience."

"Be not impatient in urging your friends to discover a secret."

"Understand not what you cannot perform, but be careful to keep your promise."

"When you speak of God or his attributes let it be seriously, in reverence and honor."

"Labor to keep alive in your breast that little spark of celestial fire called conscience."

"Be not impatient in urging your friends to discover a secret."

"Understand not what you cannot perform, but be careful to keep your promise."

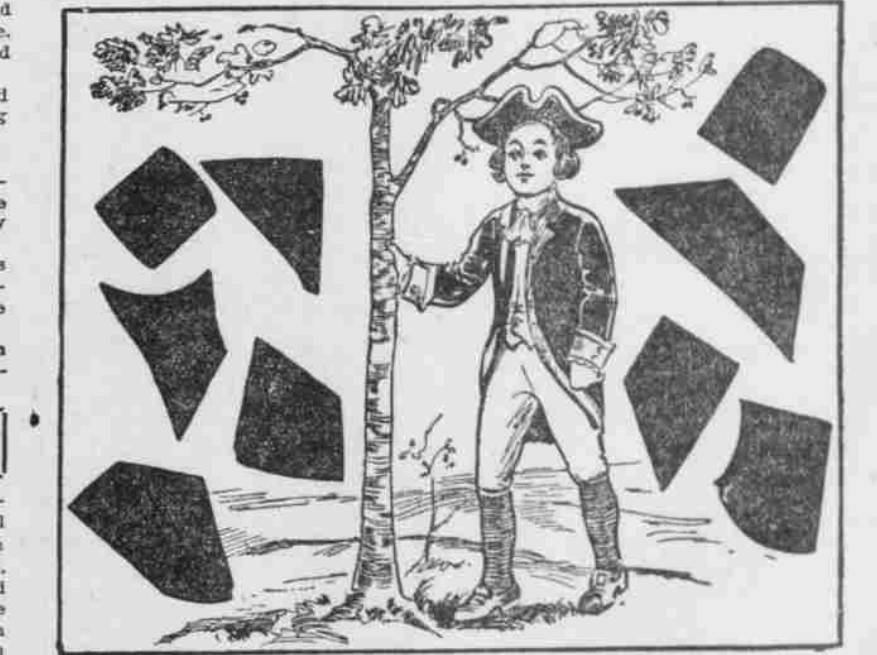
"When you speak of God or his attributes let it be seriously, in reverence and honor."



She sank on her knees and gave thanks to God for His goodness in sending the brave Washington to her.

## OUR PUZZLE CORNER

HATCHET PUZZLE.



Here is young George Washington and the cherry tree, but where is his hatchet? See if you can find it by cutting out the black spots and fitting them together.

ENIGMA.  
My first and second are in pomegranate but not in banana.  
My third and fourth are in Eva but not in Anna.  
My fifth and sixth are in iron but not in steel.  
My seventh and eighth are in lion but not in seal.  
My whole is a place closely associated with Washington.

ZIGZAG.  
If the following are written one below another, their zigzag letters, beginning at the upper left-hand corner and ending at the lower left-hand corner,

will spell the name of one of Washington's accomplishments:  
1. A United States city.  
2. A word meaning to chew.  
3. An animal.  
4. A wicked fellow.  
5. A fruit.  
6. A girl's name.  
7. A color.  
8. To go in.  
9. great.

Answers.  
ENIGMA: Mt. Vernon.  
ZIGZAG PUZZLE: Surveying. 1, S; 2, u; 3, m; 4, m; 5, h; 6, e; 7, w; 8, i; 9, t.