

### AT VALLEY FORGE.



VALLEY Forge is a rough piece of ground on the banks of the Schuylkill, twenty-one miles from Philadelphia and six from the nearest large town. As mere land, it is not worth much. But if the Pass of Thermopylae is classic ground, Valley Forge is classic. If there is one spot on this continent more fit than any other for a final and sufficient monument to the man and to the men of the American Revolution, it is Valley Forge. I do not refer merely to the hunger, thirst and cold endured there by eleven thousand soldiers, after an exhausting campaign in the field. The worst of all that misery was over in six weeks. The suffering was acute while it lasted, but it was followed soon by comparative abundance; then by the cheering news of the French alliance; then by the flight of the enemy from Philadelphia, and the swift pursuit of them by Gen. Washington. What the troops endured there would alone make the place forever interesting to posterity. But Valley Forge means more than that. It witnessed some of the most important and striking scenes in the war. It was there, too, through the constancy and tireless energy of the commander-in-chief, that the cause was saved and final victory made possible. The selection of the ground was itself a piece of notable generalship, as daring as it was wise. The occupation of Philadelphia by the British had filled every other town of Pennsylvania with refugees. The middle of December had passed before the army had repulsed the last demonstration of the British, and afforded the American commander breathing time to consider the question of his winter quarters. Then he said, in substance, to the troops: "Since there is no town for us to retire to,



### VALLEY FORGE TO-DAY.

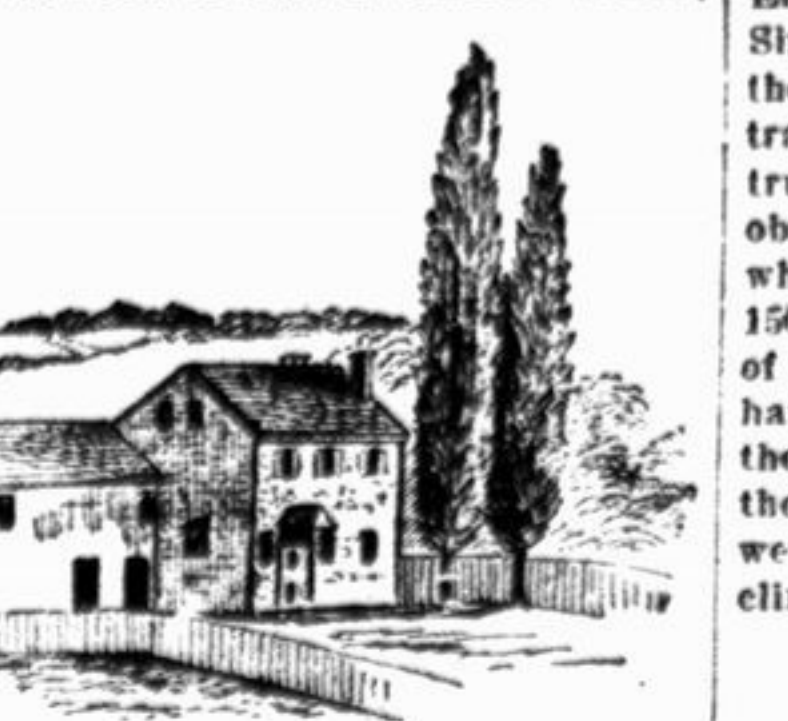
Let us create a town for ourselves, here, close to the enemy, limiting his range, curtailing his supplies, protecting Pennsylvania and holding ourselves ready to resume the aggressive as soon as he abandons the city, in which he will be by us practically besieged. He chose Valley Forge, a deep cleft in a lofty hill, with a stream at the bottom of it emptying into the Schuylkill. There was nothing in this valley for human use except the primeval forest that densely covered it and the streams of water that flowed by and through it. But Washington, himself well skilled in woodcraft, commanded soldiers most of whom had built or inhabited log-cabins. When he told them that log huts could be quickly made warm and dry, he said what they all knew to be true. He also knew precisely what was necessary for the construction of the huts, what tools were needed and what materials. His order of December 18, 1777, transformed the whole army into a cabin-building host. Every man had his place and

duty, from the major-generals to the drummers. All the tools were fairly divided; the streets and intervals were marked out, and when the work was begun the valley was alive with busy builders. Each colonel divided his regiment into parties of twelve, gave them their share of axes and shovels, and let them know that they were building a home for themselves. A cabin was to be occupied by twelve men. Gen. Washington added the stimulant of a reward to the party that should build the best hut. An order of the day had this interesting passage: "As an encouragement to industry and art, the general promises to reward the party in each regiment which finishes its hut in the quickest and most workmanlike manner with twelve dollars. And as there is reason to believe that boards for covering the huts may be found scarce and difficult to be got, he offers one hundred dollars to any officer or soldier who, in the opinion of three gentlemen that he shall appoint as judges, shall substitute some other covering that may be cheaper and more quickly made, and will in every respect answer the end." The huts were fourteen feet by sixteen, and six and a half feet high. The officers' huts were ranged in a line behind those of the soldiers, and only general's were accorded the convenience of having a whole house to themselves. Gen. Washington inhabited a cabin of one room until later in the season, when a second was added for the accommodation of Mrs. Washington. He said, in another order of the day, that "the general himself will share in the hardships and partake of every inconvenience."

It does not appear that any one invented a better roofing than slabs, nor has any one recorded what company of soldiers won the twelve-dollar prize. We only know that the cabin-building was begun early in the morning of December 19, and that most of the army would have eaten their Christmas dinner in their cabins if there had been any Christmas dinner to eat. It was just then that the worst of the starving time began. While the men were building their cabin city they lived chiefly upon cakes made of flour and water, and there was a lamentable scarcity of all the most necessary supplies—shoes, clothes, blankets and straw. Nothing saved the army from dissolution but the fiery remonstrances and energetic action of the commander-in-chief. There is preserved at Philadelphia a hand-bill issued by him while the army was building its huts. In this he notified the farmers to thrash out their grain with all convenient speed, on pain of having the sheaves seized by the commissaries and paid for at the price of straw. The conduct of the commander during these agonizing weeks can only be estimated aright by persons familiarly acquainted with the circumstances. No man ever gave a higher example either of fortitude or wisdom; and it was directly through the exercise of those virtues by him that the army was saved. While the men were busy building, news was brought to the camp that a force of the enemy was approaching. The troops were in such dire need of food and shoes that they were unable to stir. There was not a pound of meat in the camp, and not a ration of flour per man. It was while he was contending with such difficulties as these that the intrigue to supplant the general was most active and the clamor loudest for a winter campaign. "I can assure those gentlemen," wrote the general, "that it is a much easier and less distressing thing to draw remonstrances in a comfortable room, by a good fireside, than to occupy a cold, bleak hill, and sleep under frost and snow without clothes or blankets."

wrote for him. If I were asked to mention the finest exhibition that a commander has ever given of great qualities, both of heart and mind, I should answer: Washington at Valley Forge. One unexpected consolation that he enjoyed at this period was the affectionate enthusiasm of Lafayette, then just recovering from his wound received at Brandywine. The young and ardent Frenchman, in his letters to his wife and family, gives the warmest expression to his love and admiration. He speaks of Washington as a man expressly "made for" the work he was doing, he alone having the patience and tact to conciliate the discordant elements. "Every day," wrote the marquis, "I admire more the beauty of his character and of his soul. Jealous intriguers wish to tarnish his reputation, but his name will be revered in all ages by every one who loves liberty and humanity."

Many such passages, written in one of the log-cabins of Valley Forge, I notice in the family letters of the youthful enthusiast. In such circumstances, the American army was reconstructed, reinforced, becomingly clad, well drilled, and at last abundantly supplied, while the English were circumscribed so closely that it required two regiments to escort a foraging party. If it went more than two miles into the country, Valley Forge it was that rendered the possession of Philadelphia a trap instead of a capture. June 18, 1778, Gen. Washington received information that the British had secretly and suddenly evacuated Philadelphia. He was in such perfect readiness for the news, that within an hour, six brigades were on the march for the Delaware river. The next day, he himself joined the advance. Ten days after the first troops left their cabins in Pennsylvania, he fought the battle of Monmouth, which turned their retreat into a flight and shut them up in New York. If neither congress nor Pennsylvania shows an inclination to possess the scene of so many memorable events, then let some patriotic capitalist convert it into a summer resort.



### WASHINGTON'S HEADQUARTERS AT VALLEY FORGE.

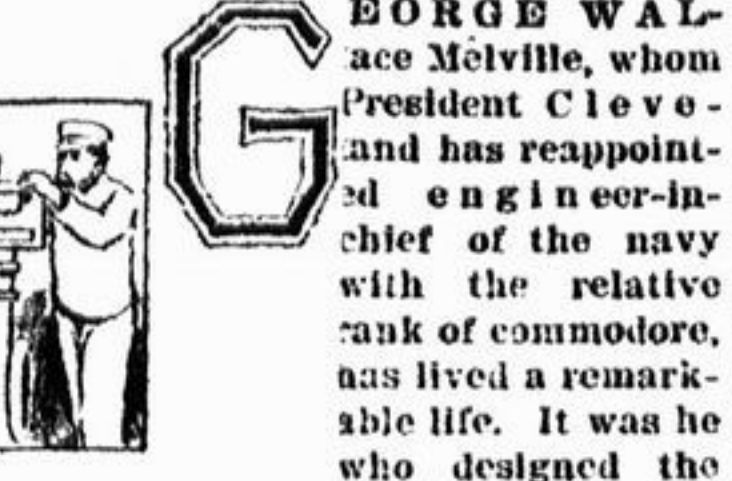
carefully restoring the old camp roads, marking all the sites and making the place an object-lesson in history.—James Parton in New York Ledger.

**Washington's Farming Operations.** Washington inherited Mount Vernon in 1759 from his half-brother, Lawrence Washington, who died in 1757. This brother had a daughter Sarah, who was heiress to the estate, but she died two years later and the property then reverted to George, who was then just 27 years old. The estate then comprised less than 3,000 acres, but soon after he came into possession he added 5,600 acres by purchase, which gave him ten miles of river front. Then began the system of improvements and cultivation which subsequently made Mount Vernon the most valuable landed property in Virginia. He drained the land wherever needed, he rotated crops, got the best farm implements then in existence, built and repaired fences, had his grist mill, his own distillery, had his own smithy for repairing tools, his own carpenter shop, looms, and he built scores of houses and cabins for his slaves. His five farms ranged from 1,000 to 2,000 acres each, and each farm had its overseer and its allotment of negroes and stock.

### GEORGE W. MELVILLE.

CHIEF ENGINEER OF THE UNITED STATES NAVY.

A Short Story of His Eventful Life—His Accomplished Wonders in Mechanical Lines—His Arctic Explorations Full of Thrilling Adventures.



GEORGE WALLACE Melville, whom President Cleveland has reappointed chief engineer-in-chief of the navy with the relative rank of commodore, has lived a remarkable life. It was he who designed the machinery of the *San Francisco*, which is the fastest ship in the navy. He has accomplished wonders in the mechanical line, but the chief interest about him centers in his arctic voyages. His first trip to the north was as chief engineer of the *Tigress*, which sailed to find the ill-fated *Polaris*. Captain De Long, of the *Jeanette*, induced Melville to accompany him on that expedition. When the *Jeanette* was wrecked the survivors in three boats made for the Asiatic shore. Melville brought his boat and its occupants to a place of safety, and then returned through the arctic night to search for the men in the other two boats. His manliness and devotion on that occasion is a glory to American manhood. When he and his companions landed on Henrietta Island he unfurled the stars and stripes on that soil



### GEORGE W. MELVILLE.

In the name of the United States. His noble effort to find De Long and the others was mentioned in terms of extravagant praise in the forty-eighth congress. In the great Greeley relief expedition Commodore Melville was the chief engineer of the *Thetis*, and in this enterprise his skill in the fitting out and forcing of the ship had much to do with the success of the undertaking. The fifty-first congress in 1891 recognized his splendid energy in the De Long expedition by advancing him in grade on the list of chief engineers of the navy. Melville was born in the City of New York in 1841. He attended the common schools there and was apprenticed in the machine shop of James Binnis. In 1861 he entered the navy as assistant engineer, and his fertility in resource caused him to advance rapidly. He is now as high in the service as he can get.

**English and French Soldiers.** Dr. Lemure in a recent article contributed to a medical paper, draws a comparison between the losses of the English army during the Ashantee war some years ago and those of the French forces in Madagascar. The mortality among the British was, from the doctor's showing, one man in sixty. In the Madagascar expedition, according to the admission of the government, one man out of every four died. Dr. Lemure points out that the climate of the Ashantee country is every whit as deadly as that of Madagascar, and he contributes the comparatively low rate of mortality among the soldiers of the English expedition under Lord (then Sir Garnet) Wolseley to the fact that they were well looked after. The contrary was the case in Madagascar. The truth of this last part of the doctor's observations is borne out by the facts which are published almost daily. Of 150 men forming the Tenth squadron of the *Chasseurs d'Afrique* only twenty have arrived home safely. This is all the more surprising, as the soldiers of the famous African cavalry regiment were supposed to be inured to a tropical climate.



### Robert Todd Lincoln.

The above is a good likeness of Robert Todd Lincoln, son of the martyred president of the United States. Mr. Lincoln is a resident of Chicago. His law business brings him an income of \$75,000 a year. He is the special attorney of the Chicago gas trust. He recently declined to have his name go before the national republican convention.

### COPPER-BOTTOMED SHIPS.

New Process for Insulating the Hells of Vessels to Guard Against Barnacles.

(From the Pittsburg Dispatch.) Considering the fact that the growth of barnacles and other animals and vegetable matter below the water line of ships not plated with copper will sometimes attain the thickness of two or more inches, weighing as much as twenty-three tons, and necessitating a cost, for docking and chipping of \$10,000 to \$12,000, the desirability of a cheap and expeditious method of coppering a ship's bottom is evident. Some time ago, it was proposed to carry out this process electrolytically, but the idea was not received without criticism. It was, however, been so persistently followed up by its originator that a plant for the deposition of copper on ships' plates by an electrolytic method is now in actual operation. The coating deposited adheres so firmly as to make its removal very difficult; in fact, it is claimed that the copper becomes practically a part of the steel plate when the process is complete.

The copper is applied to the completed and not to the separate plates, and hence existing vessels may take advantage of this method to save dockage. The possibilities of the process are not confined to steel vessels; for wooden vessels may be coppered by this method if their sides are first treated with plumbago. To prepare the sides of a steel vessel for receiving its coat of copper, shallow baths, averaging, say, sixty square feet, rectangular in shape, and open on one side, are made water tight by a coating of tar, and are provided on their edges with heavy soft rubber gaskets. In the bottom of the bath are two pipes, through which the electrolyte is circulated. The bath is held up against the side of the vessel by poles. It is first filled with a pickling mixture composed of dilute sulphuric acid, and this remains in contact with the plates about twelve hours, after which it is removed, and the plate is scoured with sand and soda. If a sulphate bath were then applied a coating would be deposited, but such coating, owing to the free acid of the mixture would readily peel off. To avoid this a preliminary coating is deposited by the use of cyanide instead of sulphate of copper. Copper electrodes are placed in the bath, and proper connection is made with the dynamo which furnishes the electrolyzing current. The sulphate bath is applied for forty-eight hours, and when the process is complete, a coating of three thirty-seconds to one-eighth of an inch is deposited over the whole surface. The process is said to save its cost many times over, besides making great economy of time possible.

**A FARMER PRESIDENT.** The Transvaal Chief Executive a Tiller of the Soil. President Kruger of the South African republic is almost 70 years old. He has served his country as chief executive for seven years, this being his second term in office. He was a farmer prior to his election, as have been all of the presidents of that tight little republic. Lawyers, bankers and speculators are barred from public office in that country. Its per capita wealth is greater than that of any country in the world. President Kruger was born in Pennsylvania in 1829.



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**A Newspaper on Linen.** A novelty in journalistic enterprise comes from Spain. It is a weekly illustrated "paper" printed on linen. The journal is appropriately entitled *La Tela Cortada* and is sold at 2½ pence. The price is modest enough in view of the peculiar advantages which are offered to subscribers. From an article on "Hygiene and Journalism" we learn that the reader has but to send his copy to the laundress after perusal in order to transform it into a superb pocket handkerchief. It will, moreover, be useful for dusting one's hat, wiping away a tear, making one's tender adieux, taking part in popular demonstrations, and "preserving diplomatic documents." Although its special applicability to the last-named purpose is not very clear, the *Tela Cortada* must be credited with considerable originality in its aim of extending the sphere of usefulness of the press.

### "Government by the People."

The movement toward the municipalization of quasi-public works seems to be spreading. Before the Boston city council is a petition from the East Boston Trade association for the establishment of gas and electric light plants in that section of the city to be maintained by the municipality. It is supported by many prominent citizens who think the experiment worth trying.

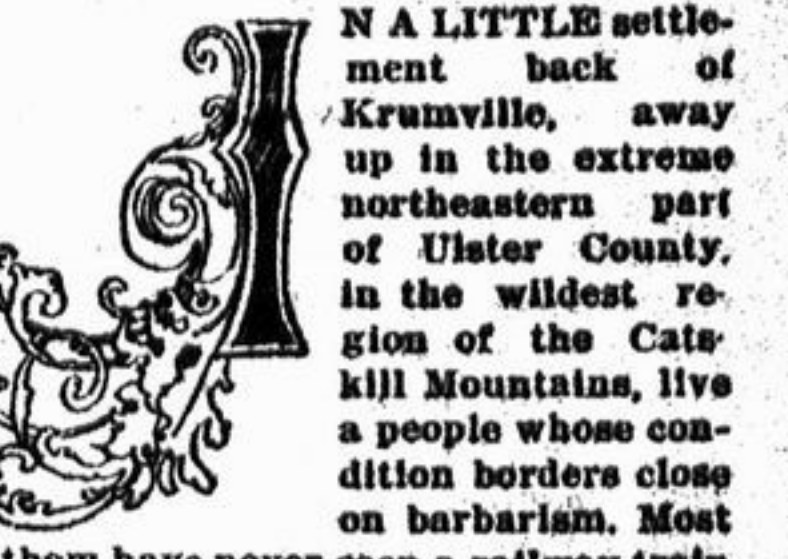
### Science in Madagascar.

A movement is on foot in Paris to send out to Madagascar a scientific mission. There will be two geologists, to study the soils and subsoils; two doctors, to study the diseases peculiar to Madagascar; two mining engineers, two botanists, two surveyors, two ethnographers, and so on.

### NEAR TO BARBARISM.

HALF-CIVILIZED PEOPLE IN THE CATSKILLS.

Little Known of Religion or the Laws of Society—Strange Little Hamlet in Ulster County Which Has Never Seen a Train or Steamboat.



### IN A LITTLE settlement back of Krumville, away up in the extreme northeastern part of Ulster County, in the wildest region of the Catskill Mountains, live a people whose condition borders close on barbarism.

Most of them have never seen a railway train or a steamboat, the world outside of their immediate settlement being a sealed book. Wives are traded as frequently and with a little ceremony as horses, and religion is an unknown quantity. Marriages are of the common-law sort and divorces are secured without appeals to the courts. It was only recently that an old man, tiring of his wife, who had reached the age of sixty, and, desiring a younger one, effected a trade with a neighbor, giving an old silver watch as boot to atone for the disparity in the ages of the two females. Trades of this kind are of common occurrence. Children born in this locality are brought up in this state of semi-barbarism. There are no educational advantages except those of a district school, some miles distant, which is open for a couple of months only during the winter. Boys learn to chew and smoke tobacco at an age when other boys have not long discarded dresses. They learn to use the name of God only as an oath. The reading is confined to the newspaper that comes to the schoolmaster occasionally, when he happens to be in the settlement. It is to him that the inhabitants look for some stray bits of news regarding the great world of which they have heard so little. Satisfied with drudgery and toil and the meagre living they get from their small farms, they never think of venturing over the mountain tops and descending to the valley where the railway trains would carry them to civilization. Perhaps the one ray of sunshine that comes into the lives of these poor people is the visit of the country schoolmaster, when the district school is blessed by his presence. As is the custom in the country, the schoolmaster "boards round"; that is, he visits at different periods of his school term among the various families of his district. Of course he is given a right royal welcome, and although the fare is of the poorest and rudest kind, yet true hospitality is given him. After the evening meal the host hands his guest a well-worn corn-cob pipe, and, taking one himself, prepares to enjoy his evening smoke. The boys of the family, if there be any, also reach for their pipes, and lighting them, smoke with the experience of veterans. It would be simple charity to send missionaries to try and redeem these rough and untutored men and women up among the mountain peaks of the Catskills. Not That Kind of a Snigger. Although a sailor can "jockey" a yardarm gracefully, he is anything but impressive in that sense on horseback. Yet one of the first things that a man-of-war Jack steers for when he gets ashore with liberty-money in his pocket is a lively stable, where he can mount the hurricane deck of an animal. During the time that one of our vessels was at anchor off Newport Liberty was given, and two of the seamen agreed to spend their limited amount of money on horseflesh. One of them negotiated with the liveryman, and soon appeared on the street perched in the saddle. When out of sight of the stable keeper, Jack's companion hove alongside and mounted behind his mate. In this fashion they galloped down Main street until the square was reached where Commodore Perry's statue is placed. "I say, Bill," cried the sailor in the saddle, "put your helm aport, and let's go up and have a look at the stat'oon." "All right, my boy," answered Bill. Then he reached back of him, caught the horse's tail, pulled it hard around on his left and awaited developments. After a minute he sang out: "Something's the matter with the steering-gear, Jack; she won't mind the helm!"—From Harper's Round Table. Holds Success Office. Sir Michael Biddulph has been a groom in waiting to the queen since 1879, and keeper of the regalia at the tower since 1891. He will vacate these offices, both of which are the gift of the queen. A groom in waiting gets £32 a year, and he is at court for about three weeks in the year on an average. The place is held for life, or until a demise of the crown. The salary of the keeper of the regalia is about £350 a year, and he has an excellent furnished house as an official residence. This is a post which ought to be conferred upon some officer of real distinction; but it will probably be jobbed away to some courtier whose "claims" consist of his family or personal interest. Silver in the Arts. The amount of silver used in the arts in this country has at last exceeded that of gold. The director of the mint gives the amount of silver that was used in 1894 at \$10,882,048 and the amount of gold at \$10,668,604. In the same year France used in the arts \$11,662,000 in gold and \$7,172,000 in silver.