ANDREW ELLICOTT.

In the December number of the new magazine called the World's Work appeared an article under the title of "The Building of a Great Capital." It is a well-written and handsomely illustrated paper, and worth reading, but some of the statements made in the article do not seem to be in accord with the history of the National Capital as we have heretofore read it.

After reciting that the site had been chosen by Washington in 1791, the author proceeds as follows: "Meanwhile Major Pierre Charles L'Enfant had been chosen by Washington to draw the plan of 'the new Federal town.' L'Enfant, a Frenchman, and a kinsman of D'Estang (the French Admiral), was a skilful military engineer who had come to America in April, 1777, in the train of Lafayette. He devoted the spring and summer of 1791 to elaborating his plans for the projected city. One point he quickly settled—he would not plan for thirteen States and three millions of people, but for a republic of fifty States and five hundred million; not for a single century, but for a thousand years. Dominated by this thought, he builded better and wiser than anyone in his lifetime was willing to admit; for the chief men of his day, meagerly educated and reared in the practice of the strictest economy, were provincial in their ideas of art and government expenditure.

"Jefferson was almost the only man then conspicuous in public life who had the advantages of extensive foreign travel; and even Jefferson wished the city laid out in the regularity of squares, with all the streets intersect-

ing at right angles, as in Philadelphia, and, unfortunately, in most other American cities. L'Enfant made the regular chess board squares as Jefferson wished, but he put in so many avenues running at acute angles that the monotonous effect was happily destroyed and the opportunity presented for making the capital the magnificent city it has since become."

The rest of the article is taken up in telling about the designs for the capitol building, how it was built, the difficulty experienced in securing the needed funds and other details which do not enter into the purposes of this article. Nowhere does the author give credit to any other man in surveying or designing the Capital City of the United States. While half a dozen handsome illustrations accompany it, the plot or survey of this French engineer, if he ever made one, is nowhere in evidence; it would be worth more than all the rest thrown together.

It is because, as I conceive, signal injustice has been done to an American engineer of high standing and wide fame in the article that the present statement is made. There was an American engineer, a resident of this city for a time, who is entitled to equal honor in surveying and plotting the National capital, and that man was Andrew Ellicott. He was born in Bucks county, this State, on January 24, 1754, and died at West Point, New York, on August 29, 1820.

I shall present briefly the most salient points in his career, and show that he is as fully entitled to whatever honor belongs to the laying out of Washington City as Major L'Enfant, who is so highly lauded in the article already quoted, although his connection therewith is not even so much as mentioned.

Of the youth of Andrew Ellicott little is known. His father, a Quaker, along with his uncle, bought a large

tract of wild land on the Patapsco river, in Maryland, in 1770, when Andrew was sixteen years old, and four years later, in 1774, erected dwellings and mills on it, and then and there founded the town of "Ellicott's Mills." Young Ellicott was of a mathematical turn of mind and gave most of his time to the pursuit of that study. Such progress did he make that his work attracted the attention of Washington, Rittenhouse and Franklin, whose friendship and confidence he also enjoyed.

In 1775 he married Miss Sarah Brown, and removed to Baltimore, and later to the city of Philadelphia. While a resident of Baltimore, he was elected to the Legislature of Maryland. He was at various times appointed Commissioner to mark the boundary lines between the States of Pennsylvania and Virginia, and also between Pennsylvania and New York. In 1789 he was elected by Washington to survey the northwestern boundary between the last-named States, continuing the line westward to Lake Erie, and it was his survey that gave Pennsylvania her frontage on Lake Erie. During the same year he made the first accurate measurement of the Niagara river from Lake Erie to Lake Ontario, as well as of the world-famed falls and rapids, and his figures on those points are still the accepted ones in all the books and maps.

In 1790 he was appointed by the Government, in conjunction with the Frenchman, L'Enfant, to lay out the city of Washington. Andrew Ellicott did all the surveying, and, in order to accurately execute that piece of work, he drew a true meridian line by celestial observations through the area intended for the National Capital. He ran all the lines with a transit, and left nothing to the uncertainties of the compass. A beautiful copy of this survey, and the map founded upon it, lies

before me as I write. It is printed in red on a piece of fine woolen cloth, 21 by 25 inches in size. In the left-hand corner, at the top, there is a portrait of Washington, and underneath it the words

PRESIDENT
Of the United States of
AMERICA.

In the right-hand corner above is a picture, consisting of two allegorical representations of Fame, holding a shield between them, over which rests an open book, with these words displayed:

Rights
Of Man.

Immediately below the picture is the following inscription:

PLAN
Of the CITY of
Washington,
In the Territory of Columbia,
Ceded by the States of
VIRGINIA and MARYLAND,
And by them established as the
SEAT of their GOVERNMENT
After the Year
MDCCC.

On the left-hand corner, at the bottom of the map, are found the following:

Lat. Capital....38: 53: N.
Long. 0: 0

OBSERVATIONS
Explanatory of the
PLAN.

1.

THE positions for the different edifices for the several Squares or Areas of different shapes, as they are laid down, were first determined on the most advantageous ground, commanding the most extensive prospects, and the better susceptible of such improvements, as either use or ornament may hereafter call for.

2.

Lines or Avenues of direct communication have been devised, to connect the separate and most distant objects with the principal, and to preserve through the whole a reciprocity of sight at the same time. Attention has been paid to the passing of those leading Avenues over the most favorable ground for prospect and convenience.

3.

North and South lines, intersected by others running due East and West, make the distribution of the City into Streets, Squares, &c., and these lines have been so combined as to meet at certain given points with those divergent Avenues, so as to form on the Spaces "first determined" the different Squares or Areas.

On the lower right hand corner we find this:

BREADTH of the STREETS.

THE grand Avenues, and such Streets as lead immediately to public places, are from 130 to 160 feet wide, and may be conveniently divided into foot-ways, walks of trees, and a carriage way. The other Streets are from 90 to 110 feet wide.

In order to execute this plan, Mr. Ellicott drew a true Meridianal line by celestial observations, which passes through the Area intended for the Capital; this line he crossed by another due East and West, which passes through the same Area. These lines were accurately measured, and made the basis on which the whole plan was executed. He ran all the lines by a Transit Instrument, and determined the Acute Angle's actual measurement, and left nothing to the uncertainty of the Compass.

It will also be noted that beginning on the east side of the map, where Rock Creek empties into the Potomac, running to the point where a canal of

the same river forms the western boundary, all the important blocks or squares are numbered, beginning with 1 and ending with 1,146. The entire work was thoroughly well done, and compiled by Andrew Ellicott and not by Major L'Enfant.

An examination of the map, which is here to-day, will give a better idea of the work than any verbal description. Under all the facts, as have been presented,the action of the writer in "The World's Work" in wholly ignoring the part, and, apparently, the most important part, of Mr. Ellicott's work in laying out our National Capital, seems unaccountable. The facts are known to the world, and one would suppose that a writer, setting out to write a chapter of our early history, should make use of them. Major Peter Charles L'Enfant was no doubt an able military engineer, but there is not a shred of evidence anywhere that he was the superior of our countryman Ellicott. Is this another example of exalting a foreigner at the expense of a native American? From whatever side of the question we may regard it, we must conclude that an undeserved slight has thereby been put upon our countryman.

But I have a few additional facts to relate concerning the career of Mr. Ellicott. In 1792 he was appointed Surveyor General of the United States. In 1795 he superintended the construction of Fort Erie, at Presque Isle, now Erie, Pa., and was also employed to lay out the towns of Erie, Warren and Franklin. The Government had continual need of his services, and in 1796 President Washington appointed him the United States Commissioner under the treaty of San Lorenzo el Real, to determine the boundaries separating the United States from the Spanish possessions on our Southern borders. In this service he was engaged during a period of nearly five years, and the

results appeared in his "Journal," a quarto volume published in 1803, in the city of Philadelphia. While engaged on this work, near Pensacola, Fla., on May 7, 1788, he observed the transit of Mercury; and on November 12, of the same year, saw the famous shower of stars, which he described as having lasted from 2 o'clock in the morning until daylight interrupted the spectacle. In returning from Pensacola to Philadelphia by sea, the captain of the ship not being sufficiently supplied with the necessary implements for its proper navigation, Mr. Ellicott used his own and carried the vessel safely to port.

Upon the completion of the last-named Government work, Governor Thomas McKean, of Pennsylvania, appointed him Secretary of the State Land Office, which he held until 1808. After his appointment to this office, Lancaster then being the capital of Pennsylvania, Mr. Ellicott removed to this place, which was only a borough at that time. His place of residence was the house situated on the southeast corner of North Prince and Marion streets. The small store house to the south of his dwelling was used by him as an office. This residence of eleven years in Lancaster gives us a just claim to number him among our citizens. In 1812 he was appointed to the professorship of mathematics at the West Point Military Academy, where he remained until his death, which occurred on August 29, 1820. While holding his professorship at West Point he was sent to Montreal by the Government in 1817, to make astronomical observations for carrying out some of the articles contained in the treaty of Ghent. He was hardly less eminent as an astronomer than as a mathematician. He was a member of the American Philosophical Society, and made many contributions to its transactions between 1793 and 1803. He was also a corre-

spondent of a number of scientific societies in Europe. His "Journal" and the other papers noted are all of the works from him that have appeared in print; a large mass of his writing still remains in manuscript.

I have reason to believe the map I have described and which is exhibited here to-day is exceedingly rare. I never saw one before or heard of one. No doubt the original is on file in the archives at Washington. This one possibly owes its presence here to-day to the fact that its maker so long lived here. That it was in careful hands during the century of its existence is seen by the excellent state of preservation in which we find it to-day. The late Miss S. Josephine Myer, among whose papers it was found, no doubt received it from her father, who was a contemporary of Andrew Ellicott, and perhaps his friend also. It may be regarded as another of the historical finds which are continually turning up in this historic county.

Of his two brothers, Joseph and Benjamin, the former, born in 1766, also followed the profession of engineering, and was for many years connected with his more eminent brother, Andrew, in his various works, especially in surveying and plotting the city of Washington, and in running the boundary line between the States of Pennsylvania and New York. In 1797 he connected himself with the Holland Land Company and was for several years occupied in surveying its large landed possessions. Upon the completion of that work he became the agent of the local company, establishing his headquarters at Batavia, N. Y. His efforts were largely directed towards building up the country in the neighborhood of Lake Erie,and the founding of cities on the lands of the company he represented. He surveyed and laid out the city of Buffalo and has most justly been called its

founder. He remained in the service of the Holland Company for a period of twenty years. He was one of the earliest and most powerful advocates of the Erie canal. He opposed Governor Clinton's plan of sending to Europe for engineers to do the work, contending that there was an abundance of home talent to do the work; a view to which he finally converted the Governor, and the result justified his views. He died in 1826, having lived to see the larger part of the Holland lands disposed of to actual settlers.

In this connection I may introduce some facts of interest concerning an old watch, which was made for and was owned and carried by Joseph Ellicott. It was brought to this county about twenty years ago by a drover from the West, who said it had been found near the site of old Fort Duquesne. In its general appearance it may be described as an old-time "bull's eye," of the most pronounced type. It is two inches in diameter and one and a-quarter inches thick. The case is of silver, but the outer shell is not detachable from the works, to which it is firmly fastened by a hinge. It is a striking watch, the bell being a cumbersome cup or dish of white metal, half an inch in depth, inside the under case of the watch, to which it is attached at the centre by a screw. There is a hollow space of about an eighth of an inch between the bell and the case, to allow a freer circulation of the sound. To permit the escape of the sound, the outer casing of the watch, both in the upper and lower half, is filagree, or open work, four of these openings being found in each half of the case. The works are capped with a heavy brass covering, after the modern fashion.

The watch is of English make, and the maker's name was Thomas Cartright, his name being deeply engraved on the upper plate of the brass works.

On the brass cap covering the works is the name of Joseph Ellicott. These are the only names. But the porcelain face also has its legend. Across the upper half is again found the name of Joseph Ellicott, and directly under it, in semi-circular form, the words, "Be Merry and Wise." Beneath these we have the arms of the Duke of Buckingham. These are, first, a plow, with a buck on full run beneath; on either side, as supporters, stand gamekeepers, with wands in their hands, capped with deer heads, as symbols of their authority. Beneath all, on the lower half of the dial, is the name "Buckingham."

What is the story of this watch? The name of the maker tells its own history, but how came the name of Joseph Ellicott in several places, and also that of Buckingham with the Buckingham arms? I will give my own version for what it may be worth. The Duke of Buckingham was largely interested in the Holland Land Company. What more natural than that he should have made what was, no doubt in its day, a costly watch, have the name of the man for whom it was intended engraved on it, and also his own name and coat of arms. This supposition arises naturally out of the names on the watch, and of the relations that are known to have existed between the two men. That seems, in short, the history of the watch.

The watch was no doubt lost by Mr. Ellicott, or some one else, nearly a century ago; most probably by Mr. Ellicott himself while surveying in the wilds of the present site of Pittsburg. When it first came into the possession of its present owner, it was very rusty, and had the appearance of long disuse. Careful inquiry among the leading trade journals of the country failed to bring to light any information concerning Thomas Cartright, the maker of this historical timepiece.

There was still another brother in the Ellicott family, by name Benjamin. He, too, was a surveyor and civil engineer by profession, but his name is of less prominence than those of his distinguished brothers. Aside from the fact that he was associated with them in much of their important work, but little is known of him.

Dr. Joseph H. Dubbs has called my attention to the fact that there was still another engineer of eminence and renown associated with the Ellicotts and L'Enfant in the survey of Washington city. It was Benjamin Banneker, a negro mathematician and astronomer, who was born at Ellicott's Mills, Maryland, where the Ellicotts themselves resided, on November 9, 1731. He was taught to read and write by his grandmother, a white woman, who liberated and then married one of her slaves. He pursued his mathematical and astronomical studies while working in the fields, when past middle life. He prepared and published almanacs for Maryland and the adjoining States for the first time in 1792, and continued them until his death. In the same year he published a letter to Thomas Jefferson, who was then Secretary of State. Through his residence at Ellicott's Mills he became known to Andrew Ellicott, who, appreciating his unusual abilities, engaged his services in surveying the site for the National Capital. Several biographical sketches of him have appeared. He died in Baltimore in October, 1806.