

Fitch, in the U. S.) but for having brought it into use over the whole civilized world. By no means. This experiment, at Barcelona, owing to the absence of journals and newspapers, those modern vehicles and wings of intelligence, was unknown to the world generally, at the time of making it, as it ever was to Fulton. And, besides, who can tell but that in like manner many inventions, which constitute at once the pride and spirit of the present age, may have existed centuries ago, in countries of forgotten civilization.—*A Year in Spain by a young American.*

[The circumstance above related is not generally known: a later date is usually ascribed to the invention of the Steam-engine, but it is not so recent as many have thought. From a work now lying before us we learn, that, "the earliest accounts of" a steam-engine, if we except the above, "is that in the Marquis of Worcester's History of Inventions, published in the year 1663; the description here is too scanty to work upon, but it furnished the idea, which has afforded to ingenious men of all nations the opportunity of putting forth their skill and their talents, in executing a number of important improvements on the subject. Captain Savery was the first person who attempted to realize the noble Marquis's project: he made the pressure of steam act immediately on the surface of water contained in a close vessel, and the water was forced by the elasticity of the steam to ascend through a pipe." To Mr. Watt, however, the public are indebted for the greatest improvement in steam-engines.]—ED. WESLEYAN.

**A CURIOUS RIVER.**—In the province of Andalusia, in Spain, there is a river called the TINTO, from the tinge of its waters, which are as yellow as Topaz. It possesses the most extraordinary and singular qualities. If a stone happen to fall in and rest upon another, they both become, in one year's time, perfectly united and conglutinated. All the plants on its banks are withered by its waters whenever they overflow. No kind of verdure will come up where its water reaches, nor can any fish live in its stream. This river rises in the Sierra Morena mountains, and its singular properties continue until other rivers run into it and alter its nature.

**CIRCULATION OF THE BLOOD.**—For the discovery of this wonderful function of nature, we are indebted to Dr. Harvey, who lived in the time of Queen Elizabeth; the knowledge of which has conferred incalculable advantages upon mankind. The velocity with which the blood must flow when the heart beats violently is inconceivable; for in the ordinary course of nature, the heart contracts 4000 times in one hour, each time ejecting one ounce of blood.

To be more particular in our description, it is necessary to state, that there is provided in the central part of the body a hollow muscle, invested with spiral tubes, running in both directions. By the contraction of these fibres, the sides of the muscular cavities are necessarily squeezed together, so as to force out from them any fluid which they may at that time contain: by the relaxation of the same fibres, the cavities are in their turn dilated; and, of course, prepared to admit of every fluid which may be poured into them. Into these cavities are inserted the great trunks, both of the arteries which carry out the blood, and of the veins which bring it back. This is a general account of the apparatus; and the simplest idea of its action is, that by each contraction a portion of blood is forced as by a syringe into the arteries; and at each dilation an equal portion is received from the veins. This produces, at each pulse, a motion and change in the mass of blood to the amount

of what the cavity contains, which in a full grown human heart is about an ounce, or two table-spoonful. Each cavity at least will contain one ounce of blood. The heart contracts 4000 times in one hour; from which it follows, that there passes through the heart every hour 4000 ounces, or 350 pounds of blood. Now the whole mass of blood is about twenty-five pounds; so that a quantity of blood, equal to the whole blood within the body, passes through the heart fourteen times in one hour.

**COAL.**—From plants has arisen that most needful and comfortable of all things, beyond the limits of the torrid zone,—the grateful warmth and use of our domestic fires. Even in this respect we may perceive that there has been a benevolent foresight and provision speedily exerted, in order that this daily comfort might continue to accrue to us, after our dissuading population should have levelled the forests which supplied the fuel. Buried in the earth just deep enough to remain unknown till wanted, that primeval vegetation, which was overwhelmed and supported by the deluge, has, during its long sepulture, become converted into bituminous coal, sufficient to yield us fire for all our purposes, though every wood should be consumed, and mankind last for more ages than they are likely to continue. In this beneficial supply of a mineral so invaluable, we have an instance of a great destruction directed by a prospective benevolence, to prepare and produce for a future age one of the kindest additions to human comfort. What a demonstration of the most deliberate goodness presiding amid the most awful displeasure.—*Turner's Sacred History of the World.*

#### THE REV. JOHN WESLEY.

*From the New York Christian Advocate.*

**MR. EDITOR.**—When in Leeds, England, the Rev. Robert Newton presented to Mrs. Fisk, a small bust of the Rev. John Wesley, said to be a perfect likeness of him at the time it was taken. A friend, in addition, procured for us the accompanying account of the circumstances and the occasion in which it is said the original likeness of this was taken. As the whole is very interesting and characteristic, I have herewith forwarded it for publication. If you think well of it, please to insert it in the Christian Advocate and Journal.

W. FISK.

Wesleyan University.

#### ANECDOTE OF THE REV. JOHN WESLEY.

Mr. Duley was one evening taking tea with that eminent artist, Mr. Culy, when he asked him whether he had seen his gallery of busts. Mr. D. answering in the negative, and expressing a wish to be gratified with a sight of it, Mr. Culy conducted him thither, and after admiring the busts of several great men of the day, he came to one which particularly attracted his notice, and on inquiry found it was the likeness of the Rev. John Wesley. "This bust," said Mr. C., "struck Lord Shelbourne in the same manner it does you, and there is a remarkable fact connected with it, which, as I know you are fond of anecdote, I will relate to you precisely in the same manner and words that I did to him." On returning to the parlour, Mr. C. commenced accordingly:—"I am a very old man; you must excuse my little failings; and, as I before observed, hear it in the very words I repeated it to his lordship. 'My lord,' said I, 'perhaps you have heard of John Wesley, the founder of the Methodists.' 'O yes,' he replied; 'He—that race of fanatics!' 'Well, my lord; Mr. Wesley had often been urged to have his picture taken, but he always refused,—alleging as a reason that he thought it nothing but vanity; indeed, so frequently had he been pressed on this point that his friends were reluctantly compelled to give up the idea. One day he called on me on the business of our Church. I began the old subject of entreating

him to allow me to do good, if you sit, time, you shall we do well, and

The first objection was a poor wretch hanging recently too young. On enquiring, I learned that he was going to be hanged, which were in shillings, which One guinea more on followed by her. On Mr. his friend, who replied he knew he more accept. They according turkey to point his care, he and poverty, they entered they poor wretch skins. On he had been in alms of comfort without any benefit for the debt of Wesley gave the utmost gratitude him liber. The poor man said, Gentlemen, pray go instantly proceeded called forth a skeleton, for his bone; his had seemed to be chamber, where young woman apparently life was quite dead. medical assistance fortunate female. from starvation imagine, my lord would not go expense was surviving sufficient to which he would fore he could tory. It appeared and had married accomplished happily together speculation in barked, he would become called all his statement of which were willingly signed who owed his