

American Arts and English Generosity.

Although the following article is somewhat long, we trust that it will be read attentively. England is a nation so truly great, that she might well afford to be somewhat generous. In whatever is splendid of arts or of arms—for all that has tended to promote the physical welfare of our race, or that has contributed to elevate the dignity of our nature, she stands justly pre-eminent. And it can be a matter of regret, only, that distinctions so justly due, and so freely conceded,—distinctions, we are sure, which no true American would either deny or diminish,—should have any of their lustre tarnished by her assumption of honors which belong to others—honors which would add not a cubit to her lofty stature, and could only deprive a generous rival of an elevation which she seeks in due progress to attain—Yet we believe that there has been scarcely one great invention of our country which Englishmen have not claimed as their own. The steam engine, our own exclusively, if Robert Fulton was an American, has been appropriated by Englishmen as being, in its essence, British discovery. The compound blow-pipe, one of the most useful inventions of American science, has been denied to us altogether by some of the chemists of England; and while unable to deprive us of the fame of the "magnetic telegraph," she has yet destroyed the grace of a generous concession, by attempting to show that Mr. Morse was largely indebted for his original ideas to others. It has fared the same way in the learned professions. Operations in surgery, first performed by Dr. Physic, of Philadelphia—but the sound of which he did not care to send forth into all lands,—were afterwards repeated in London, and then trumpeted in "The Lancet," an English journal, as evidences of the ever pre-eminent rank of British surgery. And a lawyer of Westminster hall has just published, under his own name, a Treatise upon Evidence, which copies so large a part of the work on the same subject by Professor Greenleaf, of Harvard University, that no American bookseller has dared to reprint it less he might incur the penalties of violating the copyright. But the most bold of all the British assumptions of American genius which we have yet seen, is that of Blanchard's well known "Machine for Turning Irregular Forms," a modification, as some of our readers may know, of the turning lathe, by which the workman is able to re-produce, out of ivory, metal, marble, or other hard substance, an exact fac-simile, reduced or enlarged to any size, of any irregular figure which can be inserted in the machine; and by which the most elaborately wrought pendants of flowers, alto and basso relievos of involved groupings, and statuettes of the minutest size, can be cut after any given model, by the commonest workman, by a horse, or by steam, with a delicacy, expressiveness, precision and perfection, which it is not too much perhaps to say could not be achieved on so small a scale by the chisel of Mr. Powers himself. Of the American priority of this invention, we will speak directly. In the meantime, let us mention that a recent number of the London Art Union lauds and magnifies, as a new and wonderful proof of British genius, a machine just patented in England, by which it is announced that "any solid form can be copied which the mind of the artist can conceive, or the hand execute," and felicitates its readers upon the astounding intelligence that "statuetts of the most finished form, retaining the delicate touches which are the charm of their originals," can be carved by this newly invented lathe. Now, for the benefit of our English friends, we beg to inform them that the invention of our modest countryman, Mr. Thomas Blanchard, of Boston, has been known and used by American mechanics and men of science, for about 30 years; that it has been thrice patented by Congress, and its publicity, as Americans supposed, thus reasonably secured; that the originality of Blanchard's invention has been repeatedly established by Judge Story, and other eminent jurists, of whose opinions we dare not suppose Englishmen to be entirely ignorant. Indeed, a specification of the invention was published, if we remember, about the year 1820, in the well-known London

"Journal of Arts and Sciences." The invention itself, in its application to cutting gun-stocks, has long been in use in the public armory works of the United States at Springfield, and other places visited by vast numbers of English travellers in this country; and we may even say that its merit has been acknowledged by "as handy men as ever trod on neaf's leather," since a vast proportion of all the shoe lasts of our country are cut by it. In its application to the fine arts Mr. Blanchard's name has not been so extensively known only because the fine arts are so much less profitable in our country than the useful; but for years and years past, his machine has cut, at his factory in Boston, statuettes from marble, and cameos and intaglios from shell, with the precision and beauty of Italian hand work. Any of our readers who may visit his factory there or the office of Mr. A. K. Carter, at Newark, N. J., to whom Mr. Blanchard, we are told, has assigned his patent for those regions, may see statuettes of Webster, Clay, Gen. Taylor, Judge Woodbury, and other gentlemen, which will justify the eulogy which the London Art Union bestows upon the productions of the British machine. The machines, in short, are identical, the only difference being that the American one is about thirty years the oldest.

The history of men of genius is too often a sad one! They pass their own lives in researches and labors, of which others alone derive the benefits. They generally fail to gain bread. It is too bad not to let them have glory!

[The above article is from a late number of McMakin's Model Courier, which came to us marked for particular examination. It is much longer for our columns, as an extract—than we are in the habit of selecting, but we could not condense it without altering it for the worse. The English invention which is the subject of the above article, was noticed on page 240 this volume Scientific American. We stated at the time, our apprehension that it would conflict with American patents. We have never seen the machine, but the principle of it as described to us, appears to be the same as Blanchard's. The motions are different this far, that the cutter wheel of the English revolves in a stationary frame, and pattern and rough material to be turned, move horizontally and revolve at the same time. Now Blanchard's machine is superior to this but is the same in principle; for the difference is simply this, that Blanchard's cutter moves horizontally carrying the cutter wheel from end to end of the lathe while the pattern and rough material revolve in a swinging frame. The cutter wheel however, has not an *eccentric motion* as we hastily mentioned in our last, having somehow overlooked the error; but it may be said to cut eccentrically, as it cuts out or turns any form whatever of the pattern. We like to give "honor to whom honor is due," and we agree in sentiment and with the general tone of the above article, but the author has made a mistake in attributing to Robert Fulton the invention of the steam engine. The first engine that Robert Fulton employed on the Hudson was built in Birmingham by the celebrated James Watt.—(What would we not give to have that steamboat and engine with us now, what mementos of two great men.) Robert Fulton was the first successful steamboat inventor, no man can rob him of that honor.

As it respects American and English inventions, the English journalists have blamed us for stealing their inventions, as is stated in the above article. The Scientific American was snarled at last year by Mr. Johnstone of the Glasgow Practical Mechanic, and blamed for "taking British inventions, and tacking Yankee names to them."

Now this we have never done to our knowledge, we always give the inventor *his due* let him belong to what country he may. But to carry out the "free trade" principle of Mr. Johnstone, he published Fitzgerald's cannon from the Scientific American without saying a word about where he got it, and this after having blamed us for the same practice. We do not pretend to enlighten the able editor of the Practical Mechanic in scientific matters, but we certainly can in temper, candor and language.

In some things the British are our superiors—in others we are their superiors. In tools and wood work, we surpass them, in heavy machinery, they are *ahead* of us. This however, cannot be long, for we have a wider field for display—we are more energetic, and it only wants a few rich men, like Mr. Collins of this city, to invest capital for a few years in constructing large steam vessels, &c., when our supremacy will be heralded in mechanism as in politics "Westward the star of empire takes its way."

Congreve Rockets.

The rocket is a cylinder of iron, differing nothing in shape or proportion from the paper rocket used in fireworks; it is also furnished with a stick as they are, and fired in the same way. The difference and the secret, whatever it may be, is in the composition, which, though in appearance is like an ordinary gun-powder paste, is of so firm a consistence, as to equal in hardness the iron which surrounds it. The diameter of the largest rocket hitherto used in bombardment, was eight inches; of the smallest used in field service something less than three inches; in all cases the length of the cylinder is eight times its diameter. The flight of rockets, too, varies between one thousand and two thousand five hundred yards in proportion to their size. Those intended for a bombardment are usually armed with shells, containing twenty pounds of powder, and a strong iron case of combustible matter, whose violence is inextinguishable. For field service, they are either armed with shells, or the top of the rocket formed into a mortar, which may be made to discharge at any period of its flight, from fifty to two hundred musketballs. Three field rockets may easily be carried by an infantry soldier, and they need no other apparatus for firing them than such as may be made from six muskets and a halbert, should not a bank or wall present a more convenient stand. No rocket of more than three hundred pounds has yet been used even in bombardments; but some time ago, Sir William Congreve, the inventor, proposed the use of rockets exceeding a ton in weight; these were to carry each several barrels of gunpowder in a massive base of steel; wherever they stuck, the impetus of their prodigious weight would force them indifferently through earth and mason work; thus heaving into the very centre of the enemy's fortification a mine whose explosion would leave but little trace of the curtain, tower or bastion on which it should alight.

Introduction to a Philosopher.

I must relate the circumstances of my first introduction to the learned Professor Cramer, since they were truly original. He had a country house in the suburbs; and when I called to pay my respects, I was told I should find him in his garden. I heard the sound of laughter and merry voices as I approached, and saw an elderly gentleman bent forwards in the middle of a walk, while several boys were playing leap-frog over him. A lady who stood by him said, as soon as she perceived me, "Cramer, Steffens is there."—"Well (he said, without moving,) leap then. I was delighted with the new mode of introduction to men of science, took my leap clean over him, and then turred round to make my bow and compliments. He was delighted; and as my good leap also won the hearts of the young people, I was at once admitted as an acquaintance in the happy circle. Notwithstanding this quaint reception, Cramer was a man of deep reflection, with all the quiet manner of a true philosopher.—Steffens' Journey to Paris.

Test for the Purity of Wine.

Put into a phial sixteen grains of sulphuret of lime, (prepared by exposing to a red heat, in a covered crucible, equal weights of powdered lime and sulphur) and twenty grains of super-tartrate of potass (cream of tartar)—Fill the phial with water, cork it well, and shake it occasionally, for the space of ten minutes. Separate the clear liquid by decantation, and preserve it in a well-stopped bottle for use. A portion of this liquor, fresh prepared, when added to wine containing lead, produces a blackish precipitate.

Printing in America.

The first paper mill in America was erected in Boston, in 1730, the legislature of Massachusetts granting aid. The first type-foundry was established at German-town, Pennsylvania, several years before the Revolution, from which the Bible and other works were printed in the German language. As late as 1810 there were but three type-foundries in the United States. The first printing-press in the colonies, and for twenty years the only one in North America between the Gulf of Mexico and the Frozen Ocean, was established at Cambridge, in 1638. It was nearly a century later, (1727,) before the Virginia colonists permitted a press to be set up. Rev. Jesse Glover procured the press used at Cambridge, by contributions of friends of learning and religion in Amsterdam and in England, but died on his passage to the new world. Stephen Day was the first printer, and as such received a grant of 300 acres of land. The third book published was "The Psalms in Metre." In 1661, the New Testament and Baxter's Call translated by Elliot into Indian language, were printed, at a cost of some £1,200. The whole Bible was printed in 1663. The nation speaking this language is now extinct.

The first Newspaper printed in the North America colonies was called "The Boston News-Letters," and was issued in 1740, by John Campbell, a Scotchman, who was post-master and a bookseller at Boston. Sometimes it had one advertisement, and often none. After fourteen years, when 300 were sold, the publisher announced that his weekly half sheet being insufficient to keep up with the foreign news, he should issue an extra sheet each fortnight; which expedient he announces, after a year, has enabled the "News-Letter" to recover eight months of the thirteen that it was behind in the news from Europe; so that those who would hold on the next January, (five months,) might expect to have all the arrears of intelligence from the old world "needful for to be known in these parts." After sixteen years, the publisher gives notice that copies of the "News-Letter" would be "printed on a whole sheet of writing paper, one half of which would be blank, on which letters might be written," etc.

Such was the infancy of newspaper enterprise in this country. What a change since then. Could John Campbell step into the office of one of the "dailies," with its press rolling out 8,000 or 10,000 sheets in an hour, what would be his emotions?

Harding the Painter.

We find the following pleasant notice of Mr. Chester Harding, in Catlin's recent work.

"The next morning, at the hour named found me at the door of the palace, where my name was recognized, and I at once was ushered into the apartment of the Duke [the Duke of Sussex], where I found him in his arm chair, wrapped in his morning gown of white flannel, and his head covered with a cap of black velvet richly embroidered with gold. He rose and took me by the hand in a cordial manner, and instantly led me to another part of the room, in front of a portrait hanging on the wall. 'There,' said he, 'do you know that face?' 'Very well,' said I; 'that is the portrait of John Hunter; it is an admirable likeness, and looks to me like a picture by one of our American artists. If I had met it any where else but in this country I should have said it was by Harding, one of our most valued portrait painters.' 'Well,' said he, 'you know that portrait too, do you?' 'Very well; that is his royal highness the Duke of Sussex.' 'Well,' said the Duke, now I will tell you, they were both painted by Mr. Harding. Harding is a great favorite of mine, and a very clever artist."

The Drunkard and Snake.

Two gentlemen coming up St. Louis street, New Orleans, had their attention excited by a peculiar noise at the corner of Franklin and the former street. Looking about, they found a drunken man lying in the gutter, with a snake wound round his body. They despatched the snake, which measured eleven feet in length, and had the man taken care of. Some will no doubt be calling this a snake story,—the same here.